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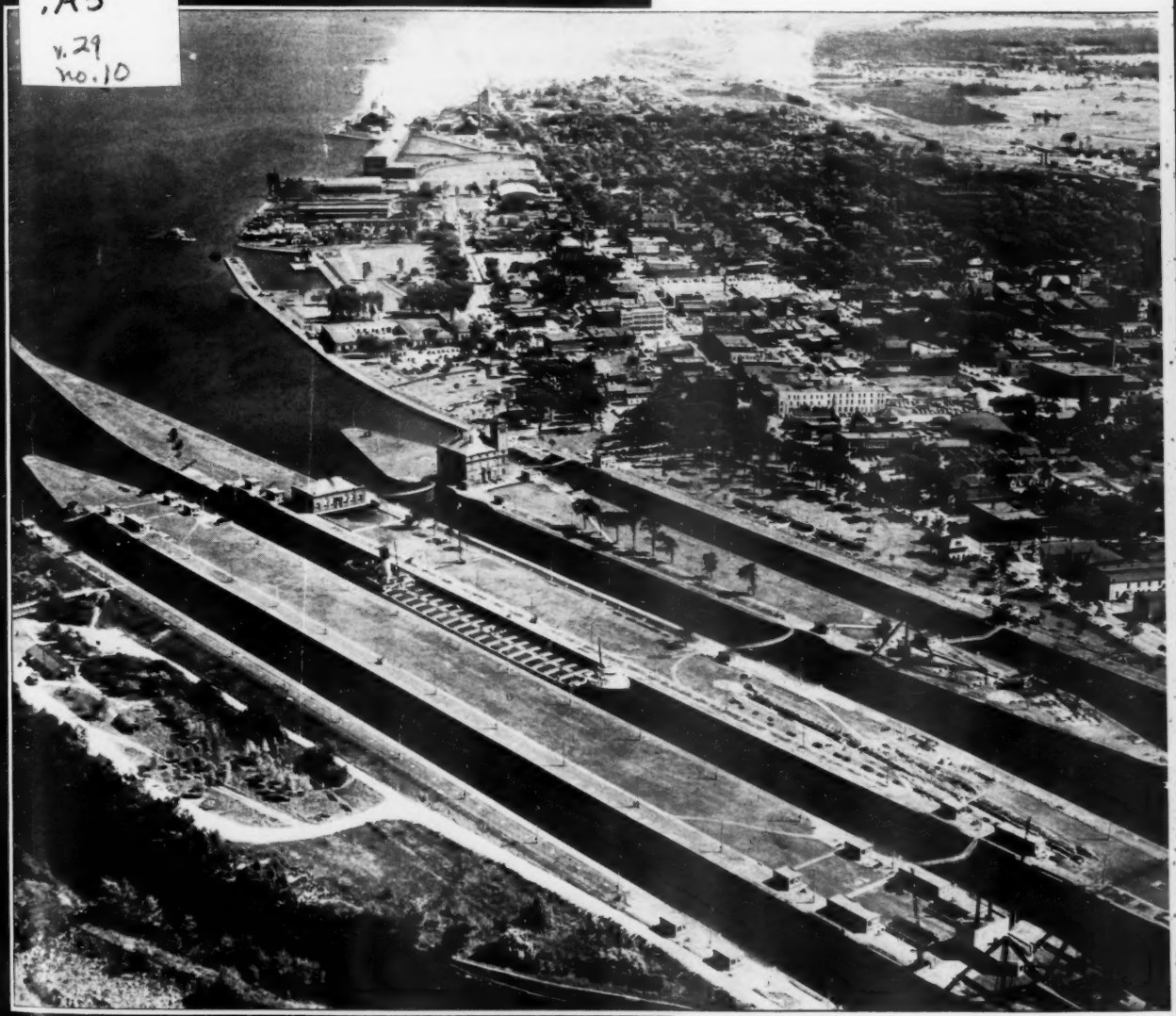

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American Vocational Journal

OFFICIAL PUBLICATION OF THE
AMERICAN VOCATIONAL ASSOCIATION, INC.
Exclusive Coverage: VOCATIONAL AND INDUSTRIAL ARTS EDUCATION

VOLUME 29 NUMBER 10

December, 1954

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This month's cover: Cutting of the canal for Michigan's famous Soo Locks in 1855 brought America low cost iron, steel, copper, and grain when the need for these materials was great. The Soo Locks centennial is scheduled for a 70 day run, starting June 28, at Sault Ste. Marie. Read the JOURNAL's salute to Michigan, pages 5-11.

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FROM AVA HEADQUARTERS

THIS issue of the AMERICAN VOCATIONAL JOURNAL salutes the State of Michigan. For many years Michigan vocational and industrial arts leaders have played an important role in the development of a sound program of practical education for Michigan and the nation. Michigan people should be justly proud of their splendid program of vocational education.

The White House Conference. May we again call your attention to the state conferences that are in the process of being developed which will culminate in a White House Conference on Education in 1955. Vocational leaders are again urged to take full part in these conferences in order to insure adequate attention for vocational education.

Much of the future progress and security of this nation is tied inseparably with vocational education. It would be a tragedy indeed should this important phase of education be neglected in state conferences now being planned and the White House Conference to be held in 1955. Adequate consideration for vocational and industrial arts education at the White House Conference is dependent on action of state and local leaders. It is a must that the programs be brought to the attention of those responsible for state conferences and the needs in these fields included in the reports of each of the several states and political subdivisions. The reports should show the importance of federal aid for vocational education.

Only state and local vocational authorities can get attention focused on vocational education. It is for this reason that we again urge you to immediately take steps to see that vocational and industrial arts education are adequately presented and represented.

Commission on Intergovernmental Relations. The National Education Study Committee established by the Commission on Intergovernmental Relations is now in the process of preparing its report to the Commission—which may never become public information. The Committee will suggest the sort of policy the Commission should recommend regarding federal participation in education—including existing programs such as vocational education. This Committee is almost sure to recommend that a policy be established that no additional federal aid be made available for education and that the federal government gradually withdraw financial support from existing programs such as aid for vocational education—except aid for programs of education designated specifically as essential to national defense. Whether vocational education will be designated as essential to national defense is yet to be seen. Educators will watch with interest the recommendation as it relates to other federal aid, such as highway construction and other grants-in-aid programs, some of which are classed as educational but not administered as a part of public school programs.

An AVA committee composed of John J. Siedel, State Director of Vocational Education, Maryland; Gilbert G. Weaver, Director of Training, State Education Department, New York; and M. D. Mobley, Executive Secretary of the American Vocational Association appeared before the Education Study Committee, created by the Commission on Intergovernmental Relations, and presented the case for vocational education. In addition, a carefully prepared document setting forth the importance of vocational education to the security and well-being of this nation and the necessity for federal aid to keep the program sound and nation-wide was placed in the hands of the members of this Committee. The point we are trying to make is that this Committee had ample facts to reach a sound decision on federal support for vocational education. We regret that the outlook is that a sound decision has not been reached. *Let's hope Congress disagrees.*

Former Commissioner of Education Speaks. On page 16 there appear excerpts from a splendid speech made recently to the Missouri Vocational Association by Dr. Earl J. McGrath, former U. S. Commissioner of Education. It contains very excellent argument for the continuance of federal aid for vocational education. We recommend it for your reading.

AVA Membership. Have you paid your AVA dues for 1955? If not, won't you please do so at once and urge your friends in vocational and industrial arts education to join at once. All new members and old members whose dues reach the AVA office on or before December 15, will receive their January issue of the AMERICAN VOCATIONAL JOURNAL as it comes from press. This will be the convention number and we are sure you don't want to miss the January issue. Unless your dues are in the AVA Office by December 15, you will receive your JOURNAL late. The AVA Executive Committee is very anxious to see the membership in the AVA increase. There certainly is adequate opportunity in many states. Under date of November 4, all officers of state affiliated associations and many leaders in each state were written a letter giving the status of AVA membership and the rank of each state.

The future of vocational education in this country is dependent in large measure on the strength of state vocational associations and on the AVA. Won't you do your part to strengthen vocational education in your community, state and nation? No other professional educational organization offers such a bargain in membership. AVA members get more for their money than they do for membership in any other professional organization. Won't you do your part to increase membership in the AVA? Won't you pledge yourself to be responsible for *one new member* for 1955?

May we wish for you the most joyous Christmas you have ever experienced and a happy, prosperous New Year.

M. D. Mobley

Executive Secretary.
American Vocational Association, Inc.

American Vocational Association, Inc.

The American Vocational Association advances American education by developing economic competence of youths and adults. The Association promotes the professional interests of persons engaged in vocational and industrial arts education. It encourages full time and part time programs in these fields; agriculture, business, distributive, home economics, industrial arts, trade and industrial, rehabilitation, and guidance.

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Guest Editorials

G. Mennen Williams

THE STATE OF MICHIGAN is honored to have the story of its vocational education activities prominently displayed in this issue of the *American Vocational Journal*. In addition to its high ranking among the nation's vacationlands, Michigan's highly developed manufacturing enterprises, its agriculture, and its countless wholesale and retail outlets play an important role in the economy of our State and our Nation. In order to perpetuate our diverse economy the skills of many men and women must be utilized. In addition to worker skills required by agriculture, business, and industry, we need each year the services of many trained food handlers, sales persons, office workers, and others to meet the pleasant but exacting task of entertaining more than ten million vacationists. The importance of vocational education in Michigan can best be illustrated by inviting your attention to a few pertinent facts. Michigan ranks first in the nation in the production of calcium chlorides, gypsum, salt, limestone, motor vehicles, automobile trailers, boats, gray iron, cutting tools, woodworking machinery, cereals, canned baby foods, sour cherries, navy beans, cantaloupes, celery, cucumber pickles, and strawberries. In addition to these facts which point to the need for many skills provided through vocational education, I could recite others.

May I extend a personal invitation to each of you to visit Michigan. You will be a welcome visitor whether you seek out a large factory, a ski or toboggan run, a lake or trout stream, or one of the scenic drives which meander peacefully along the shores of the Great Lakes or through the shaded beauty of a Michigan forest.—**G. MENNEN WILLIAMS,** *Governor, State of Michigan.*

Clair L. Taylor

MICHIGAN SCHOOLS HAVE PROFITED by the close association of the Department of Public Instruction with the American Vocational Association. The *Journal*'s pages carry items and news of significant value to our schools.

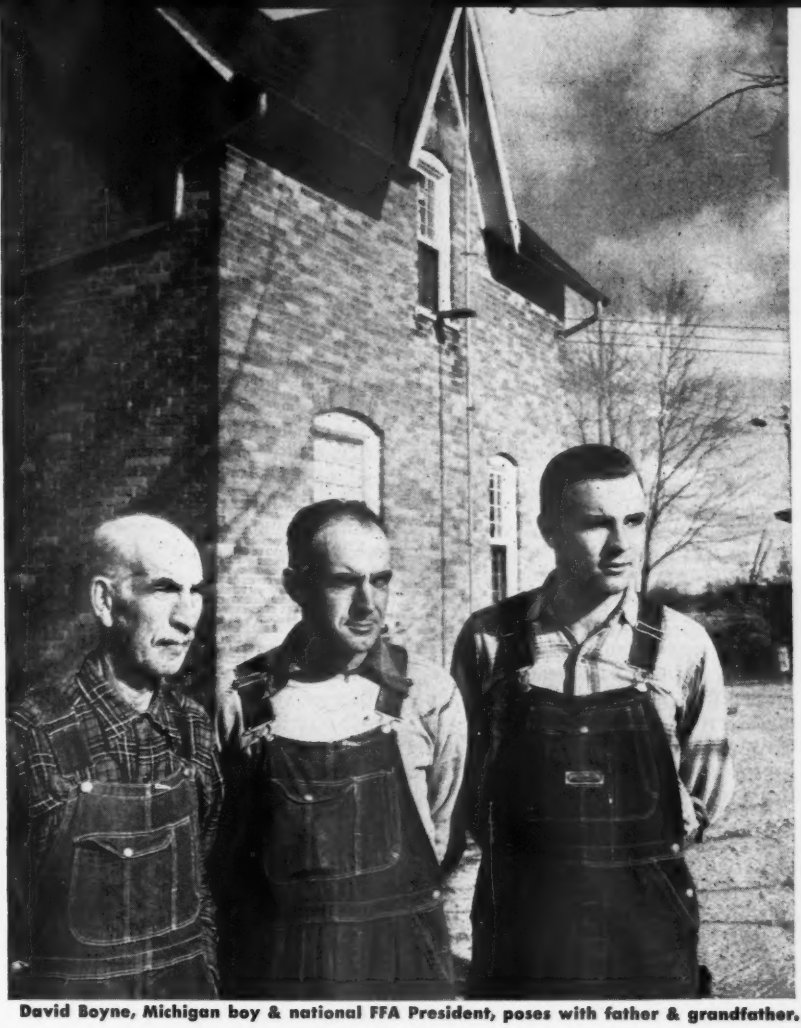
The office of superintendent of public instruction in Michigan is organized to assist local school districts in operating strong and purposeful educational programs. The efforts of the staff devoted to regulation and control are held to a minimum. The emphasis is in the direction of leadership and dissemination and exchange of useful information to the local community. Substantial efforts are made by the office of the state superintendent to involve local educators and lay persons from business, industry, agriculture, and labor to improve instruction and the educational structure. Over the years it has developed a healthful and wholesome local interest in public education. Each year this office appoints more than 500 teachers, administrators, and lay persons to curriculum and administrative committees. All are assigned the task of improving the educational opportunities for Michigan children, youth, and adults. One of these committees is the Michigan Commission on Educational Policies with members from important lay and educational organizations. This committee serves in an advisory capacity to the superintendent of public instruction in important matters relating to educational policies. Another committee is the Michigan Council for Vocational Education Administration. This advisory group is made up of local school administrators. They are elected biennially by their own regional organizations. This group serves in a counseling capacity to the superintendent of public instruction and the department's vocational education staff.

This group, like the Policies Commission, is in close contact with citizens over all of Michigan. It affords the opportunity to acquaint all citizens with the needs and progress made in vocational education.

Through the interlocking network of the membership of this entire curriculum and administrative committee structure, Michigan has been able to develop a program of which we feel justly proud.

There is much work to be done and by a continued program of cooperation the results for good can be unlimited.—**CLAIR L. TAYLOR,** *Michigan State Superintendent of Public Instruction.*

read all about vocational education in the state where a heritage of natural riches is secondary to the belief that an educated citizenry is the greatest wealth . . .



David Boyne, Michigan boy & national FFA President, poses with father & grandfather.

the journal salutes MICHIGAN

PREPARED BY A SPECIAL COMMITTEE composed of representatives from each of the divisions, Office of Vocational Education, Michigan State Department of Public Instruction; a representative of vocational teacher education; and the president, local directors.

SI QUAERIS PENINSULAM AMOENAM CIRCUMSPICE: "If you seek a pleasant peninsula, look about you." A look at a map of Michigan will reveal the peninsular character of the State; a single visit will convince you that its geographical and scenic nature is, indeed, pleasant. The Wolverine state, "inland empire of the unsalted seas," occupies two adjacent peninsulas. The eastern end of the upper (northern) peninsula is separated from the lower (southern) peninsula by The Straits of Mackinac. Stretching northward from the Ohio-Michigan boundary line, the lower peninsula extends 275 air miles to the Straits, a narrow inlet which connects Lakes Michigan and Huron. The upper peninsula extends an equal distance westward from the uppermost tip of the lower peninsula. A glance at the map will confirm that Ironwood, in the western extreme of the northern peninsula, is farther west than St. Louis, Missouri; Hancock is as far north as Montreal, Canada; and Port Huron is as far east as Greenville, South Carolina.

The lower peninsula is bounded on the west by Lake Michigan, on the north by the Straits of Mackinac, and on the east by Lake Huron, the St. Clair River, Lake St. Clair, the Detroit River, and the northwestern shore line of Lake Erie. The upper peninsula is bounded on the north by beautiful Lake Superior, on the east by St. Mary's River, on the south by Lake Michigan, and on the narrow western border by the State of Wisconsin. Of Michigan's approximately 3700

miles of state boundary line, more than 3000 miles is washed by the waters of the Great Lakes. In addition, the State's 11,037 inland lakes and 36,500 miles of streams account for 1194 square miles of water vacationland within its boundaries. An appreciation of the vast amount of water in and around Michigan peninsulas easily explains why the State's auto license plates proclaim it to be a "Water Wonderland."

The wealth that lay within the boundaries of that part of the North American continent which later became Michigan was yet undiscovered when Jean Nicolet, in 1634, became the first white man to pass through the Straits of Mackinac. As agent for Champlain, then Governor of Canada, Nicolet would certainly have encouraged earlier exploration of the Michigan peninsulas had he dreamed of the vast wealth which lay to his right and his left as he journeyed throught the Straits. Inhabited at the time by the Ojibwa (Chippewa) Indians, the upper peninsula lies to the north and west of the Straits of Mackinac. Within the twenty-odd thousand square miles of this virgin northland were billions of dollars in hardwood forests, an inconceivable fortune in the world's only large commercial deposit of native copper, almost incalcuable tons of rich iron ore, and more than 4000 crystal-clear fresh water lakes.

To the south of the Straits lay Michigan's lower peninsula, inhabited by the Ottawa Indians along the Lake Michigan shore from the Straits of Mackinac to the Grand River, and the Potawatomi Indians in lower Michigan southward from this point. It was this portion of the Wolverine state which was to become one of the nation's great producers of steel goods, furniture, farm and other products that have contributed to Michigan's position of economic leadership in the industrial northeast.

The people of Michigan from the early days of the white man have recognized that their greatest wealth is an educated citizenry. Historically, each succeeding generation has applied itself with increasing diligence to the important task of maintaining a system of free public education . . . one which would serve to meet the greatest number of needs of the largest number of children, youth, and adults. The present-day Michigan citizenry has not lost the determination to improve continuously every aspect of free educational opportunity. Evidence of this truth is the fact that during the current fiscal year the public schools of the State will receive more than $200,000,000 by appropriation through the State Legislature. However, even the generous support of public education by the people of Michigan is less important than was the contribution of the Michigan judicial system, when in 1872, the now famous Kalamazoo Case settled forever the legal status of the tax-supported secondary school. It was this important judicial decision which made possible our system of free secondary education in which vocational and other types of educational experiences are provided in accordance with individual and local needs.

We believe that one of the functions of education within our socio-economic complex is that of developing programs concerned with providing occupational competence for youth and adults consistent with their needs as citizens in an industrial society. A second requirement of the educational process, it seems to us, is that it contribute to the satisfaction of specific individual needs. It is in the translation of these two essentials into functional programs of action that a distinctively unique feature of the Michigan program of vocational education can be observed in full perspective. For many years those responsible for the leadership and direction of vocational education programs have been committed to several fundamental beliefs. The first of these is that the concept of "education" is a markedly inclusive one with vocational competence as one of several desirable goals of the process. Second, is that the level of excellence of an educational program is inevitably conditioned by the quality and quantity of shared understanding of all who work in it or are influenced by it. And, third and last is that if the shared process by which desirable goals are established and attained is sound, one may reasonably expect that the educational process will lead to the satisfaction of local needs.

"It is in the area of community involvement in the total educational program that Michigan has sought to make its major contribution."

Inherent in the pattern of beliefs enunciated here is the implication that adequate consideration of needs, problems, and issues in a comprehensive program of education demands that persons from all walks of life be involved in its planning and evaluation. This involvement should not be an indiscriminate one; on the contrary, those persons whose behavior affects the school program, as well as those whose behavior is affected by it, should share in the formulation of goals and in the critical evaluation of progress. Broad participation requires that a marked amount of energy and social invention be brought to the process of involvement and collaboration with members of the larger community. It means, also, that such techniques as small group planning sessions, workshops, and committees involving teachers, administrators, and other school personnel be utilized to improve the quality and degree of group participation.

The Michigan practice of involving large numbers of professional and lay persons in the planning and appraisal of educational goals and achievements is more than a public relations device or a promotional scheme devised to encourage public support of education. The plan represents a philosophy of educational cooperation; it is a reflection of genuine interest in soliciting assistance to arrive at an educational program designed to meet the most needs of the greatest possible number of persons. It is in the area of community involvement in the total educational program that Michigan has sought to make its major contribution. The extent and nature of this involvement is illustrated in reasonable detail in these paragraphs.

The Office of Vocational Education utilizes approximately 30 consultative and advisory committees in planning and evaluating vocational activities and programs. In addition to separate advisory committees serving each division, a number of special purpose committees are appointed. These cover such areas of interest as Future Farmers of America, Future Homemakers of America, industrial arts, private trade schools, practical nurse education, fireman education, and others. The total number of members involved in the divisional and special committees exceeds 400. In addition, the apprenticeship committee structure associated with the Trade and Industrial Education Division has more than 400 local branch committees involving more than 2500 representatives of labor and management. This apprenticeship committee structure is entirely voluntary since no legal requirements relating to apprenticeships have been estab-

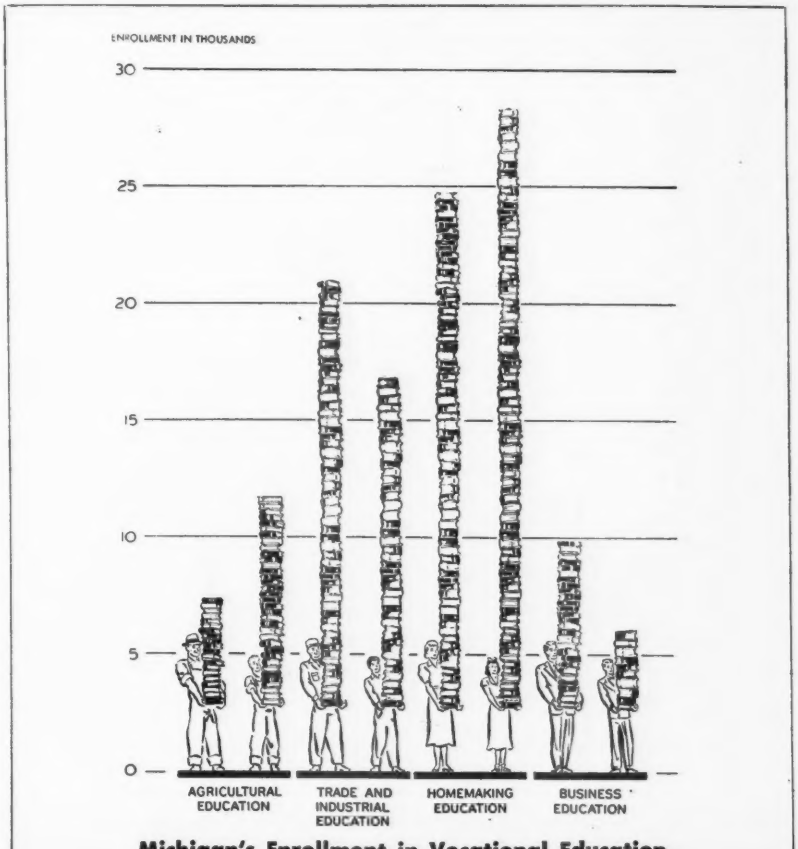
The Michigan Council for Vocational Education Administration meets regularly.

lished in Michigan. The Office of Vocational Education, however, does share responsibility with the Federal Bureau of Apprenticeship in the registration and indenturing of all apprentices. Apropos to the reference above to the number of persons involved in planning and evaluating vocational education in Michigan, homemaking education offers a unique example of this involvement. A home economics curriculum group, actually a subcommittee of the Home and Family Living Advisory Committee, is a series of 18 regional committees involving 1200 homemaking teachers who work cooperatively in the development of instructional resource materials.

One outstandingly unique feature of the advisory committee plan of the Office of Vocational Education is the Michigan Council for Vocational Education Administration. This group, which serves in an advisory capacity to the State Director of Vocational Education, was established in 1943. Its major purpose is "the promotion and improvement of vocational education as a part of the general public education program in the local schools of the state." The Council is composed of 18 local public school superintendents, one from each of 18 established geographical districts of the Michigan Education Association. Each representative to the Council is elected biennially by the superintendents in the district which he represents. The right to hold membership on the Council or to vote for a representative is restricted to superintendents having reimbursed vocational education in one or more areas. Among the important achievements of this group has has been the modification of undesirable standards, simplification of reporting procedures employed in reimbursable programs, elimination of unreasonable requirements in some aspects of the vocational teacher training program, and the establishment of a channel of communication with local superintendents which has brought about prompt consideration of local problems involving vocational education.

One of the chief values of the vast network of advisory committees lies in the fact that many local educators and lay persons are acquainted with the plans and program of the Office of Vocational Education. That these persons do interpret the program to parents and other citizens in local communities was made evident in a recent survey. A questionnaire titled, *How Would You Answer This?*, was answered by more than 40,000 adults in over 100 communities. One item in the questionnaire read as follows: "All of us want our children to have a good education in the three R's, health, and perhaps some science. Beyond this, what would you insist on and be willing to pay for even if it should add to your school tax bill?" The one item favorably responded to by the largest number of persons (75.1 per cent) was one relating to instruction in a vocation (job skill) of the pupil's choice. The second highest choice (60.9 per cent) was home and family living (including budgeting, buying, family relationships, child care, food, and clothing). Though other factors doubtlessly enter into the strong desire of Michigan people for adequate vocational education opportunities, the involvement of local educators and lay persons has served to help familiarize local communities with its purpose and worth in the total program of education.

The Michigan Office of Vocational Education was first to employ a qualified Practical Nurse Education consultant, who provided leadership for development of 8 local centers for the training of practical nurses. These centers have contrib-



Michigan's Enrollment in Vocational Education

Above, l. to r.: Fire fighting instruction; planning for a home experience project; discussion of seeding wheat and fertilizer (Father, teacher, and Rollin Blossey, 1953 Regional Star American Farmer). L., practical nurse training and programs for the blind are part of the program.

"Michigan schools have profited by the close association of the Department of Public Instruction with the American Vocational Association."—CLAIR L. TAYLOR, Michigan State Superintendent of Public Instruction.

Below, l., plastic models are used to plan an industrial arts shop. R., business students learn mimeograph machine operation in school.

uted materially to the satisfaction of local need for practical nursing services both in urban and rural areas. Several thousand practical nurses have received certificates in this program since its inception in 1942.

Michigan is the only state that employs a research specialist with responsibilities for research in all fields of vocational education. The research service seeks to stimulate research and development in local communities as an administrative resource at the state level.

The Cooperative Training Section of the Office of Vocational Education is unique to Michigan. This section cuts across the responsibilities of both the Business Education and Trade and Industrial Education Divisions. Composed of a representative of each Division, it provides administrative and consultative services to all types of cooperative programs including distributive, office, industrial, and diversified occupations.

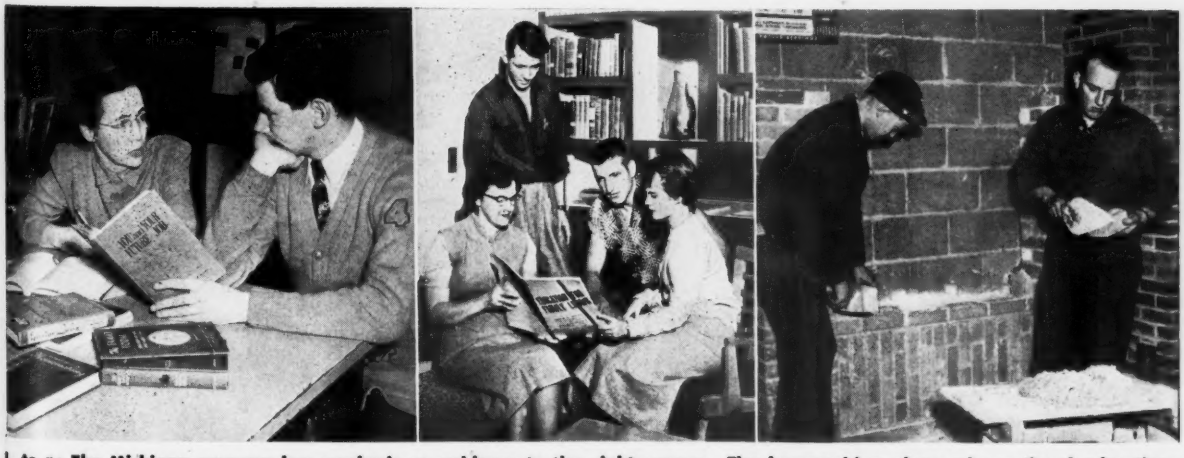
The Office of Vocational Education subscribes to the philosophy that the schools and their programs of education belong to the citizens of each local community. The further belief is held that each community should be responsible for deciding what the curriculum should be and that, accordingly, no attempt should be made at the state level to exercise undue influence in this connection. This philosophy of local determination is evidenced in two distinct ways: first, the State Office provides no courses of study or other directive materials of a curricular nature and, second, members of the staff not only bear the title of *consultant,* but also serve local schools in that role rather than as supervisors.

The COMMUNITY is your CLASSROOM
COOPERATIVE OCCUPATIONAL TRAINING IN MICHIGAN SCHOOLS
BULLETIN No. 297
Michigan State Board of Control for Vocational Education
Certificate of Achievement
FOR SATISFACTORILY COMPLETING A COOPERATIVE OCCUPATIONAL TRAINING PROGRAM IN THE JOB CLASSIFICATION OF
COOPERATIVE OCCUPATIONAL TRAINING
ACHIEVEMENT RECORD

The Cooperative Training Section of the Office of Vocational Education is unique.

The State Office devotes a great deal of attention to the evaluation of local education programs. Frequent studies are made to determine the extent to which former students are making use of the vocational training received while in school, as well as to obtain employer appraisal of the effectiveness of vocationally trained graduates. Evaluation studies currently being carried out in cooperation with local schools relate to cooperative education, day trade, practical nurse education, part time farming, and homemaking education. In addition, a number of demonstration research programs are under way in vocational education and guidance services.

The Michigan program of vocational education places much emphasis upon youth-serving organizations. These include Future Farmers of America, Future Homemakers



L. to r.: The Michigan program has emphasis on guidance to the right career. The homemaking phase of vocational education finds family living as important as cooking and sewing. Mason apprentices in Michigan public schools learn by doing.

of America, and the Retailing and Office Club. Emphasis in these youth organizations is in the direction of training future leaders rather than in furthering skills related to occupational interests.

A notable feature of the Michigan program of vocational agriculture is the annual summer conference. This conference provides a variety of professional attractions for agricultural education teachers, local directors of vocational education, and school administrators. It is a part of an extensive in-service training program. In addition, 16 in-service training centers are operated for the purpose of keeping agricultural education teachers abreast of new technical developments in the field of agriculture.

A notable degree of cooperation has been developed between the several vocational education divisions in the state office and college personnel concerned with vocational teacher education. This cooperation is made evident through a joint Committee on Vocational Teacher Education, shared research projects, joint staff meetings, and numerous informal professional contacts. Vocational teacher education staffs employ an advisory committee pattern not unlike that of the Office of Vocational Education. Usually comprised of representatives of labor, management, school administration and supervision, and vocational teachers, the advisory and consultative committees work cooperatively with teacher and counselor trainers in planning and evaluating their respective programs. The teacher and counselor training institutions approved by the State Board of Control for Vocational Education include Michigan State College, the University of Michigan, Wayne University, the Central Michigan College of Education, Michigan State Normal College, Northern Michigan College of Education, Western Michigan College of Education, and Albion College.

The development of adult vocational education in Michigan is indicated by the fact that the adult evening program for all services enrolls more persons than does the day school program. In addition, a special annual legislative appropriation

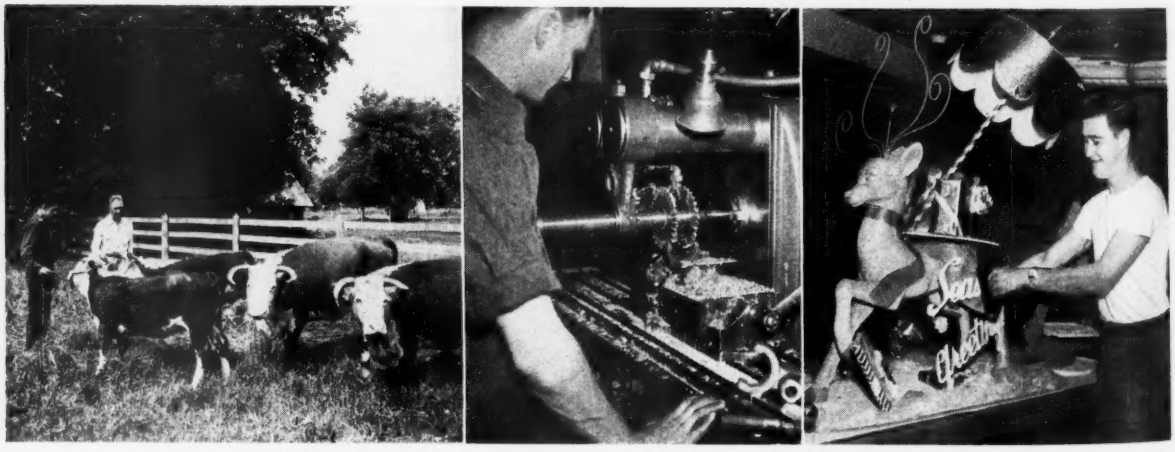
Michigan state presidents of FHA, FFA, and Retailing and Office Club.

provides additional local opportunities for adult education in a wide variety of educational, avocational, hobby, and other interest areas.

A "pilot" guidance program is operated jointly by the Office of Vocational Education and the communities of Algonac, Marine City, Marysville, and St. Clair. A guidance consultant works in all four communities, assisting schools to continuously improve guidance services for all pupils. The program was established to develop better ways of improving guidance programs through the use of consultants, to provide more effective ways for small schools to evaluate guidance services, and to experiment with the counseling of adults by high school counselors. The latter part of the program has been recently initiated and will be subjected to careful evaluation at the close of the school year.

A plan of selecting enrichments to add to the homemaking program is designed to encourage local schools to select one which will provide a "plus" factor in the local homemaking program. Of the three available enrichments, the "extended experience" feature is somewhat unique. Homemaking teachers are provided an extra class period free from regular teaching responsibilities for carrying out such functions as developing homemaking programs for adults, serving as a resource person or consultant to other departments in the school or organizations in the community, making home visits, and performing other similar activities.

No space has been devoted to the organizational pattern of the Michigan Office of Vocational Education. Since the pattern is not unlike that of other states, nothing of value would have accrued to the reader by such a description. We have attempted to present a picture of the unique features of the vocational program in the state and to leave with the reader some of the philosophy related to the program. The staff of the Michigan Office of Vocational Education extends its appreciation to the AMERICAN VOCATIONAL JOURNAL for this opportunity to talk to its readers about vocational education in Michigan.



L. to r.: A vo-ag student begins his own herd; a trade student mills a fork; and a DE co-op boy says: "Merry Christmas."

A PROGRAM AND A SYSTEM

will do it, says Delaware, first in the nation in AVA membership achievement for 1954.

MEMBERSHIP IN THE DELAWARE Vocational Association decreased considerably during the year December 1, 1952 through November 30, 1953. Recognizing this, the DVA Executive Committee decided that drastic action was needed to maintain current membership and to encourage potential members to join.

A plan that would include more of the membership in planning and managing association activities was adopted. It was also decided that a constitution should be written to replace the by-laws that had governed the organization for more than 25 years.

A chairman was appointed and provided with general instructions on the points that should be covered by the new constitution. This is emphasized because the adoption of a new constitution on October 22, 1953 generated the spark that has given our association new life.

Article II, sections A, B, C, D, and E outline the purposes of the Delaware Vocational Association as follows:

- To establish and maintain active leadership in the promotion of all types of vocational and industrial arts education, including guidance services and directed work experiences for youth and adults.
- To render service to state and local communities in promoting and stabilizing vocational education.
- To unify all the vocational and general education interests of the state through representative membership.
- To encourage further development of programs of education related to vocational education, including industrial and other forms of practical arts.
- To emphasize and to encourage the promotion and expansion of programs of vocational part time and vocational adult education.

A Membership Committee Chairman was appointed as a result of the October 22, 1953 meeting. He was given authority to name the personnel of his committee. Because Delaware is small both in geographical size and population, the Membership Chairman decided to make the most of these natural advantages and therefore planned to take into consideration the 3 geographical areas (counties); to provide for the saturation of personal contacts in the industrial and agricultural areas; to utilize those personnel who work in common fields for the canvass of potential members; to keep committee members up-to-date on campaign progress and to provide stimulation through pertinent memos; to use printed materials as aids whenever possible; and to set up a program and follow it through.

THE MEMBERSHIP COMMITTEE

A. B. ANDERSON. Assistant State Director, *lay members*

DR. ROBERT J. DARLING, State Supervisor of Guidance, *guidance members*

WILLARD H. FISHER, Coordinator, Distributive Education, *downstate DE and BE members*

ROBERT C. GRAY, T & I teacher, *upstate day teachers*

DR. RAYMOND W. HEIM, State Director for Vocational Education, *administrative members*

PAUL M. HODGSON, Vocational Education Teacher Trainer, *University of Delaware members*

EMILY A. KING, State Supervisor, Home Economics, *home economics members*

JAMES H. MOORE, T & I Teacher, *upstate day teachers*

W. LYLE MOWLES, State Supervisor, Agriculture, *agriculture members*

LEON F. OSINSKI, Coordinator, Apprentice Training, *evening school and part time members*

DR. HARRY Q. PACKER, State Supervisor, Distributive Education, *upstate DE and BE members*

NICHOLAS SILVERSON, T & I Coordinator, *downstate T & I members*

DR. WILLIAM J. SCHOTT, Assistant State Supervisor, T & I, in charge of Teacher Training, *Membership Committee Chairman.*

By Dr. William J. Schott
Chairman,
Membership Committee
Delaware Vocational Association

Utilizing the mails to make individual appeals, the Membership Committee made it easy for prospective members to join by providing them with self addressed envelopes.

Reproduced here is the letter that was sent to Advisory Committee Members by A. B. Anderson, Secretary, State Vocational Advisory Committee for Trades and Industries:

"The annual drive is now on for membership in this association. All members of our advisory committees will, I am sure, be interested in membership in the American Vocational Association and the Delaware Vocational Association. Membership includes receiving a copy of the AMERICAN VOCATIONAL JOURNAL which is published monthly and contains many important articles on the development of our program. There will soon be a "Salute to Delaware" that you will not want to miss. You can also contribute to the cause of vocational eduation in Delaware by lending your support to these associations. They are the only professional organizations in vocational education available to most of us. Our President, Mr. Alexander C. Davidson, and the other officers of the Association want to make this a most successful year and they will all greatly appreciate your support. Please send your dues of $5.00

Note the excellent use that was made of the "Salute to Delaware" in the appeal for new members. In my opinion the salutes to the states, published monthly in the JOURNAL, can be used effectively to stimulate membership.

Here is a typical memo that went out to members of the Membership Committee:

"There are now 151 paid-up members in the Delaware Vocational Association. Such a great increase in membership over last year's total of 117 would not have been possible without your combined efforts.

"I believe that we may have a total of 160 paid-up members before the annual spring banquet.

"Next year the DVA should be able to enroll more than 175 members."

A review of the efforts of our organization indicates that hard work with a systematic method of follow-up is more important than originality when trying to increase organization membership.

Guidance for living? . . . for adults?

Tabbing it "essential instructional practice for adult homemaking departments" New York State says yes indeed!

And here's how they do it in the Rochester Public Schools.

By Ray M. Mattson
Supervising Teacher of Adult Homemaking
Rochester, N. Y.

IN COMPLETE ACCORD WITH THE belief of the Adult Education Association of the United States of America, that the fundamental goal of adult education is to enable adults to deal intelligently, democratically and peacefully with the problems posed for individuals and communities by the pervasive fact of change, the adult homemaking department of the Rochester Public Schools finds counseling an essential instructional practice.

The whole field of home and family living can be analyzed into many areas of study and every one of these areas has phases that can be taught to adults using formal and informal group techniques. Child care, meal planning and preparation, clothing construction, and furniture refinishing are a few examples and they bring many others to mind. However, even in classes of adults studying these subject materials, there are other phases which include individual personal factors that make individual counseling necessary if the instruction is to meet the student's needs; and in voluntary education there are no students if needs are not being met. Subject matter, per se, does not necessarily allay anxiety and remove the apprehension and confusion which assail adults on every side today.

Also, home and family living involves personalities, and democracy's respect for the dignity of every life prohibits the bandying about of private problems of persons or families, in public. Formal adult classes and discussion groups hold no special license in this matter. To illustrate: it does not help solve the "A" family's financial problems to have all their neighbors openly discussing Mrs. "A's" excessive tendency toward extravagance and the probable psychological underlying reasons for it. On the other hand, when the "A's" recognize that their financial dilemma must be faced, one or both parents may seek assistance by attending an adult class in family finance or home management, and through this experience find further individual help is needed. Having come this far and learning that this opportunity for individual help is theirs without having their private affairs revealed to others, they will not hesitate to seek it. To remedy their situation may require several personal interviews, spaced so certain carefully chosen processes can act between conferences, and counseling is the most effective instructional method to use in such cases.

Child care, family relationships, home management, consumer buying, home furnishing, and the other areas of homemaking are fraught with ceaseless change. Every member of a family changes mentally and biologically from birth until death. The cycle sequence of maturity of humans constantly calls for new decisions and adjustments in family living. One need but consider the single aspect of the social responsibility to one's family group, starting with babyhood and moving through the pre-school, elementary school, teen-age, young adult, mature adult, older maturity and senility periods to realize the pervasiveness of change, and the uncountable complications it creates. Adding climatic, seasonal, political, legislative, industrial, and the myriads of other forces of change which constitute man's environment, it is obvious to the serious adult educator that in the realm of home and family living, group instruction—no matter how excellent—must be supplemented with individual instruction of a kind which searches out and weighs honestly as many of the personal factors in a given situation as possible.

Rochester has several well-publicized counseling services available to the adult public in the field of home and family living—such special agencies as the Catholic Family Center, Family Service of Rochester, Jewish Social Service Bureau, Red Cross, Legal Aid Society, and the Better Business Bureau, to mention

a few—besides clergymen, social service workers, physicians, lawyers interested in improved family relationships, bank consultants, public health organizations, and others; and there is a strong cooperative bond which unifies them professionally.

Counseling helps adults approach problems of family living

The Adult Education Division of the New York State Department of Education recognizes that personal counseling is a part of adult education because sound adult education has no limits, but up to this time has not given it status in its fiscal policy; so in Rochester the teacher or administrator who does counseling fits the interviews into the calendar whenever time from other regular duties and responsibilities can be found, and he is not classified as a counselor officially. Most of our requests for interviews come through contacts made in adult classes we teach, study groups we help organize, programs and institutes we participate in, and through the professional counseling agencies which refer cases to us.

Inasmuch as the Rochester Public Schools try to serve the public always, no request is ignored. However, upon hearing the nature of a case one frequently sees that it should be handled in its entirety by a professional counselor in a specialized field, and makes the referral as gently but directly as possible, giving enough facts about the specialist and his work to maintain the rapport which must carry through to the end if learning is to be accomplished. Two examples in this category are: (1) A young mother who had defied her husband and parents in following drastic measures over a period of months to reduce her weight became frightened by the results and asked for nutrition information to offset the emaciation becoming apparent. She assumed there would be no cost for this information. She was correct in the assumption that there is no charge for our services, but this was clearly a medical practitioner's case so was immediately referred to a physician. (2) A father of three teen-age children wished help in restoring peace and happiness to his family. His mother, upon the death of her husband two years before, had come to the city to "visit" her son's family and refused to leave. Too small living quarters combined with a variety of emotional tensions had made the situation bitter and unbearable to all including the grandmother but she was adamant. This case was referred to Family Service of Rochester.

The bulk of cases which come in have to do with the pre-school child in a family, home management, personal and family finance, consumer buying, guest meal occasions, and nutrition. Housing, clothing and family recreation cases usually fall into the consumer problem bracket. Some typical cases follow: (1) A mother reports that although her four-year-old son has practically every type of known toy in his playroom he insists on being close to her "every minute" and "doing" whatever she is trying to do, all the time he is awake. He can't be left in the care of anyone else. She knows "what the books say" but is not successful in carrying out their suggestions. The father insists that the "nonsense" be stopped. The mother asks for assistance. (2) A husband, with nerves completely shredded after living twelve years in a totally disorganized home, asks if he and his wife may come in together to receive help in establishing a workable household routine for them and their three children. The children are 6, 8, and 10 years old and should be learning to assume some home responsibility. The wife is intelligent, eager, and in excellent health, but has never been able to organize her activities on a time and sequence basis. (3) The father of four children, the oldest a girl of 14, makes an appointment for his wife to come in for help in the matter of determining clothing allowances for children, "particularly for a 14-year-old girl." He "can't stand the arguing and the tears any longer." (4) A woman whose husband is subject to hyperacidity, trying to follow the physician's orders to avoid acid-producing foods in the husband's diet, is told by her grocer that she is not selecting such foods. His suggestions do seem feasible to her; and besides her husband dislikes some of the foods the grocer claims are best. May she come for help?

To the home economics trained woman with continuing practical experience in home management, child development, and general homemaking such problems do not present insurmountable difficulties, but those whose problems they are are desperate because of their helplessness in approaching them. Each crisis has come about through change and calls for intelligent treatment, if severe chaos in lives is to be avoided. The questions, "What would you do?" and "What shall I do?" are not the counselor's to answer. The standard of living, the values, the traditional background, the experiential background, the health, the size and source of the income, the abilities, the time, the number of members, the likes and dislikes, the ambitions and goals, and still other features of the family involved (not the counselor's) all have to be considered before a constructive course of action can be determined upon.

The adult homemaking educator who bears no official counseling label is at a great advantage in this type of instructional situation, because no person comes for assistance who does not have his confidence already established, and maintaining a friendly atmosphere and an objective attitude is not difficult for those who enjoy the confidence of adults. They are regular action patterns, basic to confidence. The homemaking field is rich in opportunities for the counselor to help his interviewee release tensions and impart information and at the same time identify his own abilities and aptitudes. There is no occasion for a barren struggle here. The individual and his home life are so closely associated every statement tells a part of the story; and when he is ready to develop a new plan he includes himself in the plan.

True, the counselor does contribute factual information here and there where it is needed, but mainly he tries to lead the interviewee to a self-understanding, a "must" if he is to make and carry out better plans in the future. Counseling is an instructional process, not simply a revealing conversation. If situations call for a change of attitudes and breaking of habits, a series of interviews spaced far enough apart to permit progress are required; so the educator is never certain how long it is going to take for a student to find himself functioning more satisfactorily and should not let this element become a disturbing one if the student is really trying.

In the Rochester adult homemaking setup the counselor consistently assumes the position of a fellow-inquirer and uses only widely recognized authorities. This procedure puts the student into a direct relationship with an authority who may be consulted at will and leaves no bars in the way of future learning.

Change comes to all persons as long as life lasts and adult education in home and family life without counseling would be limited indeed.

Take a look at ETV...

HAVE YOU EVER FOUND yourself wishing that those excellent descriptive drawings or photographs in "do-it-yourself" books could move—or that you could see behind and around them? Or have you ever wished you could have just 5 minutes with a master craftsman — to clear up some detail of written or pictured instructions?

Through the medium of TV the highly skilled artisans and artists can be with you—doing before your eyes the work you want to do—and explaining everything they do, step by step, and why. The value of television education cannot yet be measured. The full measure of the medium's training potential will be the yield of the non-commercial ETV stations as they grow in number. This is true because the sole purpose of these stations is education, training and uninterrupted service of their communities' best interests. They will have the time to allow recognized authorities to start with the beginning of a given course and, through constructive programs at fixed hours, continue to the end of that course. In that way alone can thorough training and its benefits result. And the air time required for such training can be provided only by stations built and operated for such specific purposes.

For that reason in itself the greatest single contribution to vocational education and general education in the U. S. may well be the FCC's reservation of 242 channels for non-commercial educational use. This action was taken in April, 1952. Subsequent reservations have brought the present total to 251.

Vocational education is a field in which the non-commercial ETV stations can render incalculable service. It is here that even the least imaginative can see what TV can contribute. Conversely, those interested in vocational education can help create and maintain the non-commercial stations from which they will directly benefit.

How? By cooperating with local groups now planning campaigns for funds or by stimulating the formation of groups to lead supporting movements for these stations. The National Citizens Committee for Educational Television, Ring Building, 1200 18th Street, N.W., Washington 6, D. C., will gladly supply assistance and information under either heading.

The benefits from ETV will affect each of us and our children. The responsibility of assuring that they and we obtain these benefits is ours.

In an early statement about ETV, Charles E. Wilson, industrialist and former National Mobilizer, said in part: "The future growth of America, of our economy and of our security, is directly dependent upon our ability to continue to increase the level of education in the United States. So rapid is the advance of our technology that present methods of education no longer are fully adequate. . . ."

In conclusion Mr. Wilson said: "I urge the support of educational television by every man and woman who has serious consideration for this nation's future and for the future of their children."

Vocational education can be increased, technical proficiency advanced, and the interest of the public stimulated and multiplied by the programming of non-commercial ETV stations.

Why? In the first place, the high efficacy of television as a training and teaching medium has been irrefutably proven.

Non-commercial ETV stations can provide step-by-step instruction and demonstration. They can allocate the amount of time essential to thorough instruction at fixed hours best serving the greatest number.

This instruction will be available at home, thus, non-commercial ETV courses provide many opportunities to enroll for examinations and scholastic credits. It would be foolish to prophesy to what extent training will be increased, proficiency advanced and interest stimulated. Those who know the value of television as a training medium would label as understatement an estimate which others would consider to be fantastic exaggeration.

There will be important dividends —immediate and long-term. Perhaps the first will be increased proficiency of those already advanced. Another, possibly more important benefit, is both immediate and long-term. That is the broadening influence of ETV training. For the non-commercial stations can combine sustained instruction in the manual skills with co-related training in design, aesthetic as well as functional, and the increasingly important matters of color and lighting.

In the field of light alone a bright new world is being discovered—not only in the study of appropriate and/or pleasing effect but in the exacting work of light control. Many have known for a long time that the color, type and intensity of light definitely affect our feelings and outlook.

Between the early "spot" and "flood" lies a world of special requirements met today through experimentation with lenses, lamps, reflectors, and their housings. Much remains to be done as anyone knows who has tried to focus just so much light on a particular surface from an inconspicuous source.

Non-commercial ETV stations can provide concurrent or integrated exposure to the best in design in all media—wood, metal or whatever—the finest specimens of the classical and the modern. Through ETV, trainees all over the country will have access to the collections of great museums and also to examples of the best contemporary work — and have them explained and analyzed by specialists.

This is only one of the countless services the non-commercial ETV stations can render vocational education, but it is one of the most important.

To awaken in young trainees the feeling that color, form and functional excellence should go hand-in-hand can effect future American output. Today many products—doing well what they were made for—are rebuilt, at great cost, along the lines of an industrial designer. There is no telling how much retooling can be avoided through planting early the seed of attention to design as well as efficiency.

A tangible long-term benefit of vocational training by ETV will be to enable more and more people to appraise an estimate and check the

. . . Vo-ed's newest classroom

quality of a job and time spent on it. Few will question the practical value of that.

Vocational training figures today in the program schedules of the non-commercial ETV stations now on the air and among the projected programs of areas where these stations are not yet built. For example, in the *Survey and Plan for Educational Television* published by the Greater New Orleans ETV Foundation, Inc., projected programs include—"I Want to Be" a half hour live program featuring qualified career guidance counsellors—"Interior Decorating Course" — "Sew What," basic instructions in sewing—"Arts and Crafts," at the upper elementary level,—"Owning a Home," a course at the adult-college level beginning with site selection continuing through design, financing, construction, etc., etc. and "Landscape Art"—an instructional course. The Consolidated University of North Carolina whose station is expected to be in operation this year advises, "That we will air programs aimed at adult job training, vocational guidance and labor-management problems we know; what they will be . . . we are not yet in a position to say."

To list the programs in the vocational field which are actually on the air would require many pages. They are being done in all sections of the country and cover a wide variety of subjects. The April edition of the JOURNAL dealt with FFA-TV shows. There are many others of this nature. For example, the University of Wisconsin has a program, *Farm Features,* comprising the planting of trees, grass silage, market grades of beef steers, and pre-emergence spray in corn; while the Wisconsin Department of Agriculture provides *Farm Program* on Friday nights with "butter grading," meeting livestock health problems, the corn borer outlook and other timely subdivisions. (The programs mentioned are from the May schedule.) Two alternating daily programs, *Today's Farm* and *Today's Home,* carry many telecasts of vocational training value.

In Delaware, the Wilmington Public Schools, Department of Child Development and Guidance, have telecast *Careers Calling* during the past 4 years. The series is produced in conjunction with the television sub-committee of the Department's Vocational Guidance Advisory Committee and this year comprises some 11 types of careers.

The Detroit Public Schools Department has used TV to demonstrate the use of power sewing machines, making hats and practical nursing. Other programs from the same source are: "Printing," "Printers at Work," "Beauty Is My Business," "On the Job," "Maintaining a Car."

"How to Sell More in '54" is a Friday evening feature of "The Adult School on TV" over KTHE, the Los Angeles non-commercial ETV station. Presented by the Public Adult Schools of Los Angeles City and County, the series deals with personalities, customers, products, etc., in the light of selling.

Michigan State College at East Lansing offered a credit telecourse called "Salesmanship Principles and Practices" under General Business 322.

Seattle has seen a series of some 25 programs called "Workshop" based on the work of the local public technical school and YMCA technical classes.

But even the complete list of what is being done or planned would simply be a record of the first steps in the use of TV for vocational education. Already these programs have served to prepare the minds of the very young—to broaden the horizons of others.

However pointless the argument, there are some who still say—"why not let the commercial stations do this work." To them might be related the following comment of a New York banker:

"To ask commercial station operators to undertake full scale educational programing is the same as the Board of Education requesting our Bank to close down the major part of our business and donate the space so cleared to classroom use."

Every ETV station that comes on the air advances vocational education. Each of us can help bring them into operation. The more who help—the sooner will the resulting local and national benefits be shared by greater and greater numbers.

The National Citizens Committee for Educational Television will do everything possible to help you to help ETV—if you will write to Ring Building, 1200 18th Street. N.W., Washington 6, D. C.

by Frederick B. Bate,
National Citizens Committee for Educational Television

L. to r.: Mrs. Judith Guthers; Mrs. Alma Armbruster; Mrs. Eleanor MacDonough; and Mrs. Bernice Papworth; participate in an educational TV series in California.

THE TRUTH ABOUT VOCATIONAL EDUCATION

HOW ARE WE FARING economically today in comparison with 1920, just three years after the passage of the Smith-Hughes Act? If we look at the gross national product, that is the total value of goods produced and services rendered in 1920, for example—a year which, by the way, was not in the trough of a serious business recession—we find that the gross national product for that year was 91.6 billion dollars, while in 1953 this figure has risen to 364.9 billion dollars. Even when these figures are corrected with respect to the purchasing power of the dollar, it is clear that the total value of goods and services produced in the United States has risen several times since 1920. A number of factors have, of course, been active in determining the magnitude of the gross national product, but without question one of the most important of these is the productive capacity of each individual worker. Here again, the figures are dramatic. Take the productive capacity of farmers. The Department of Agriculture, using the years 1947-49 as a base figure of 100, reports that the farmer of 1920 produced 49 per cent as much per man hour as the farmer of 1947-49, and in 1953-54 each farmer produced 151 per cent more than the farm worker of 1920. Moreover, farmers growing crops increased their production more than twice as much as those raising live stock. The department states that though increased mechanization of farm equipment, scientific research, and better seeds and fertilizers have all played a part in this increased production, the greatest factor is the broader knowledge and greater skills among the farming population resulting from their educational background in agriculture.

In the shops of the nation too a similar rise in productive capacity has occurred. In terms of the value of the 1939 dollar the gross national product in private organizations, the hourly rate (value of production) in the manufacturing and service industries not including farms, rose from 77 cents in 1920 to $1.42 in 1953. And in this same period the average work week in industry dropped considerably. In 1930 the average work week of 6 days in industry was 48 hours. From 15 to 20 per cent worked more than this and 10 to 15 per cent less. In 1953, 68 per cent worked 40 hours per week, 18 per cent worked less and 14 per cent more. . . .

Vocational education cannot claim all the credit for these improvements in economic and social conditions in the United States, but no one familiar with the facts will deny that the part it has played has been very important indeed. It is my firm conviction that the future well being of our people will to a considerable degree be determined by the success of the vocational education program in supplying youth with the knowledge and the skills needed in further industrial and agricultural expansion and in the continued improvement of American home life. For many American youth, vocational education programs will constitute their last formal education and their best opportunity to prepare for gainful employment. If they do not receive this instruction during the appropriate years, many will not receive it at all, and many will wander in an occupational wilderness without direction or guidance. Many young people will drift from one job to another spending years of their early lives in trying to discover their real occupational interests and abilities.

In these days of international conflict another very important value of vocational education should be emphasized. In the last analysis the strength or the weakness of the free world will be determined by living conditions among the people generally. It was abundantly clear in the days of the Second World War that the success of our military effort was dependent upon industrial and social activities carried on thousands of miles from the actual fighting. It is likewise abundantly clear now that the defense of the free nations against the assaults of Communism will in large measure depend upon our continued superiority in technological and scientific fields and in the maintenance of high morale among the citizenry generally – morale which springs from workers who know their jobs and enjoy working at them.

We know that the Russians have been putting increased emphasis on all types of education to improve the skills and productive capacity of workers. If we are to retain our advantage in this respect, it is absolutely essential that each individual in our own country maintain a high level of personal productiveness through the maximum development of his skills and abilities. In our effort to reach this goal vocational education has a unique contribution to make.

It can also make a significant contribution in the conflict with Communism by playing its part in the raising of living standards in other regions of the world. . . .

It is my earnest belief that we will not win the underprivileged to our banner merely by making gifts of money, food, and military supplies. But we can win them by giving them the knowledge and the skills by which they can improve their own living standards and gain the independence of mind and spirit which is the deadliest enemy of all totalitarian systems. My experience in several regions of the world leads me to say without hesitation that the development of a strong program of vocational education would in the matter of a few years enormously enhance the lives of the people and strengthen the free world in its conflict with Communism.

With this evaluation of the value of vocational education on the domestic and international scene let us

From an address to the Missouri Vocational Association by Dr. Earl J. McGrath, President, University of Kansas City, and former, U. S. Commissioner of Education

now examine the present status of vocational education. Last year there were in the high schools of the United States 3,100,139 students enrolled in programs supported by funds from the Smith-Hughes Act of 1917 and subsequent similar legislation, the legislation largely responsible for the development of vocational education in this country. In 1917, when the Smith-Hughes Act was passed, business men and laboring groups alike united with educational leaders in urging the enactment of these laws to guarantee a steady flow from the high schools of the nation of young people capable of taking jobs as skilled workers in industry and commerce. Likewise, farming groups saw the advantages of a program which would prepare rural youth for more productive lives on the farms of America and other groups promoted programs in home economics to improve home life. Later through the George-Deen Act of 1936 similar opportunities were provided in distributive education. Thousands of teachers have been trained to carry on these programs at a high level of efficiency. As a result of these efforts, in the year 1953, 755,000 students were enrolled in agriculture, 1,327,000 students in home economics, 808,000 students in trades and industry, and 209,000 students in distributive education. This is an encouraging picture and one from which those who believe in vocational education may take much pride and satisfaction.

Viewing these developments of the past 34 years some may ask whether objectives of the Smith-Hughes legislation and the other acts of Congress related thereto have not already been fully achieved? In spite of this excellent achievement this question must be answered in the negative. Of the 24,000 public secondary schools in the United States last year, only 14,000 had any vocational education program whatever, that is, offered any instruction in even one field, agriculture, distributive education, trades and industry, or home economics. Of these schools which did have some vocational courses, the majority offered only one program, as for example, agriculture or trades and industry. As is frequently the case, rural youth is less well served in these programs than city youth. There are more than 5,000 high schools serving young people in the farming areas which have no program of vocational agriculture. Of those high schools which do have agriculture, more than 1,000 need an additional teacher to carry on the programs adequately. The total enrollment of about 400,000 pupils studying vocational agriculture, though it is a large figure, does not even come within 50 per cent of reaching the need for replacements on our farms. If there are to be adequate replacements with trained persons in vocational agriculture there should be about 1,000,000 students in these programs.

If we turn to trade and industrial education the picture is no more satisfactory. It has been conservatively estimated that if the needs of the nation are to be met, twice the number of young people who are now receiving such training, should actually be in a vocational program.

Enhancement of American home life through the development of programs in home economics has been incalculable. Fortunately, a large percentage of American high schools offer this instruction for young women who wish to gain the knowledge essential in creating an attractive and efficient home. They have the knowledge needed to rear children with the full benefit of modern developments in nutrition, psychology, economics, technology, and decoration. Many others will seek employment in occupations related to home economics. Yet more than 7,000 high schools have no program whatsoever in this field, and the lack is particularly severe in programs for out-of-school youth and adults. Moreover, in this field there is a severe shortage of teachers needed to carry on existing programs and others yet to be established.

These facts make it abundantly clear that when one asks the question, has vocational education reached full maturity?, the answer must be "no." The cold bare fact is that less than 50 per cent of the young people of the nation who need and can profit from vocational education of less than college grade have an opportunity to gain such an education. . . .

The President has stated that the Government and the States should form a partnership in the support of activities designed to benefit all our people wherever they live, whatever their social status, and whenever they need support. Surely there is no better example of the effectiveness of such a partnership over the past 35 years than this vocational education program which is supported jointly by the Federal Government, the states and local communities. It is one that should be continued and used as an example for other areas of endeavor affecting the welfare of all our people.

May I say in conclusion that though I believe those interested in vocational education for American youth should not relax their efforts now I do not believe the federal expenditures for vocational education will be reduced in the years immediately ahead. . . . I feel confident, as I am sure you do, that the future of vocational education will be as secure as that of the nation itself, and that is what all wise persons of humanitarian impulses want.

A famous educator applauds the unique contributions of vocational education to economic and social prosperity and answers the question, "Has the program reached full maturity?"

State Presidents—

The Journal salutes presidents of AVA-affiliated state vocational associations for outstanding service to the fiield of vocational and practical arts education. All those shown here are heading their state organizations.

Mildred Harper
Alabama VTA

Otto T. Krausse
Oklahoma

Richard Tigner
California (DE)

Mrs. Ella P. Moran
National Capital

Joseph Duck
Missouri

R. Lee Hornbake
Maryland

John Bell
Iowa

Enrique Irizarry
Puerto Rico

Arthur Taggart
Pennsylvania

Roy Sterrett
South Dakota

Dan Martin
Washington, D. C.

W. W. Craighead
Old Dominion (Va.)

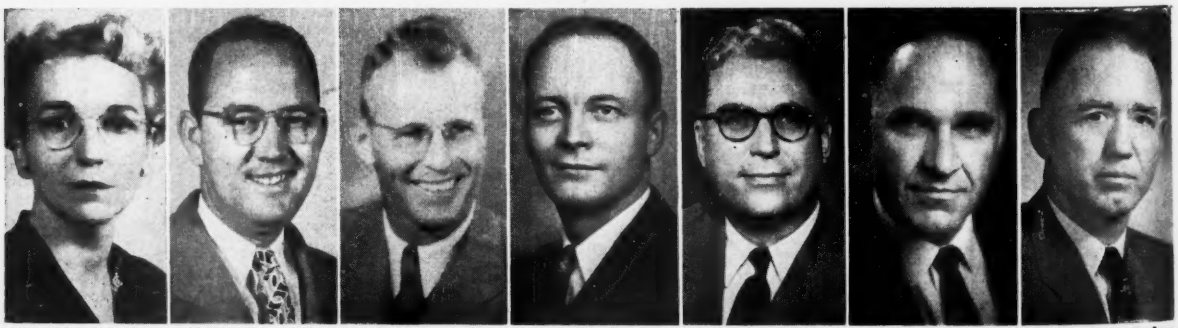
Arley Heinze
Calif. (Vo. Ag.)

Harold J. Haynes
Vermont

Eugene Hart
Ohio

Joe C. Metzger
Indiana

Wilbur Brokaw
Ill. (Vo. Ag.)



Mrs. Virginia Rice
Kentucky

Marion C. Roche
Florida (Vo-Ag)

L. E. Norsworthy
Mississippi

James A. Horton
North Dakota

Homer F. Ely
Illinois

Philip H. Haney
New Jersey

F. Theodore Paige
Ohio (Ind. Arts)

J. Morley Dixon
Mich. (Ind. Ed.)

Victor Edman
Arizona

D. W. Stevenson
South Carolina

Paul J. Moore
Tennessee

Tom Raine
Minnesota

Jane Jones Vogeley
Virginia

G. C. Norman
Florida

Ruby Holland
West Virginia

Donald Kabler
Oregon

Ethel Wright
Maine

Ralph Gruenwald
Iowa

Eugene Harris
Pelican V. A. (La.)

G. Roy Fugal
Connecticut

Paul Gonzales
Louisiana

H. Glenn Segars
Georgia

Ransom W. Harris
Michigan (Vo-Ag)

George C. Dodge
New York

Mercedes Bates
Calif. (Home Ec.)

William E. Ratekin
Colorado

William Lathrop
Wisconsin

J. K. Barnett
California (Ind. Ed)

H. D. Bedford
Texas

H. W. Crawford
Palmetto (S.C.)

Dorothy Gordon
Magnolia (Miss.)

Karl Kluge
Washington

Marie Williams
Utah

Ray Harrison
New Mexico

P. Joseph Corrigan
Massachusetts

John F. Clark
Idaho

Charles Mantz
Kansas

Claudia Hardy
Alabama

Ray D. Lowe
Wyoming

Le Roy Pennington
Arkansas

Cecil B. Arnold
Mich. (Bus. Ed.)

A. C. Davidson
Delaware

Eliminate Emergency Repair Jobs With A Complete Farm Mechanics Program

by Evans G. Thompson
Associate Professor of
Agricultural Education
Virginia Polytechnic Institute
Blacksburg, Va.

THE TREMENDOUS INCREASE in farm mechanization in recent years has important implications in developing a sound teaching program in vocational agriculture.

It has been estimated that less than 15 per cent of the population of the United States is engaged in farming. Farmers have obtained more and more labor-saving devices to offset this decrease in available farm labor. This increase in the use of farm machinery and mechanical labor-saving devices of all types has been more rapid than most of us realize. According to the United States Census report, the number of tractors on farms in the United States has increased from 2,421,726 in 1945 to 3,609,281 in 1950, an increase of about 49 per cent. The *Farm Implement News* estimated that on July 1, 1953, there were 4,234,212 tractors on farms in the United States, or an increase of about 75 per cent based on the 1945 census figure. It is also estimated that about 75 per cent of these tractors are of the wheeled type that are actually being used on farms.

In 1945 there were 4,148,300 automobiles on farms as compared to 4,199,200 in 1950, and 1,490,200 trucks as compared to 2,206,700 in 1950. The need for rapid transportation of farm products to accompany the larger power units has made the farm truck an important part of farm mechanization. The use on farms of other production implements has increased also. These trends, together with the continuous change in type and design of farm implements, have had an important influence on the efficient production of farm products.

About 85 per cent of the farms in the United States had electricity in 1950, an increase of about 28 per cent since 1945. New and economical farm uses for electricity are continually being developed. Modern plumbing facilities, improved lighting, food processing, power applications of electricity in farm production, and crop processing are but a few of the important ways in which electricity is being used to improve farming and rural living.

The trend in farm buildings and fences is to plan for greater efficiency in the use of labor and machinery, improved crop storage conditions, and better facilities for housing and feeding livestock. Maintenance of farm buildings has always been a major item of expense for the farmer. To reduce maintenance costs, the trend is toward the use of more permanent materials that require little upkeep. Construction materials such as concrete footings and foundations, masonry blocks and asbestos shingles for walls, and aluminum, good quality galvanized metal, or asphalt shingles for roofs are being used more each year in constructing farm buildings.

The progress in farm mechanization has confronted the farmer with a large number of new problems in the area of farm mechanics. The vocational agriculture teacher is in a position to make a major contribution, through his teaching program, to the solution of some of these problems. If we are to attain the primary objective of vocational agriculture—"To train present and prospective farmers for proficiency in farming"—we must provide adequate instruction in the mechanical phases of farming to meet the needs of all groups (all-day students, young farmers, and adult farmers). The teaching program must provide for instruction in all the educational areas of farm mechanics, namely, farm shop work, farm power and machinery, farm electrification, farm buildings and conveniences, soil and water management, and processing farm products. Probably the most widely accepted objective of farm mechanics instruction is—"To develop in the students (all-day students, young farmers, and adult farmers) the ability to perform those unspecialized jobs that need to be done on the farm with the tools and facilities available." But, this concept does not seem to include some of the important aspects of farm mechanics, since it implies or is usually interpreted to mean that training is to be given only in the manipulative phases of farm mechanics. It more nearly meets the objective of farm shop work, which is only one educational area in farm mechanics.

With the large amount of money that farmers have invested in farm machinery, buildings, and other labor saving devices it is practically impossible to be an efficient farmer without being able to select the proper machinery and equipment for the farming needs and to make efficient use of the machinery and

equipment after it is purchased. Thus, farm mechanics should include instruction in such jobs as selecting, operating, and maintaining machinery; planning and maintaining farm buildings, fences, feeders, etc.; planning and maintaining the farm wiring system; selecting and using farm shop tools; and planning and installing irrigation systems. This instruction includes managerial and operative jobs as well as the manipulative phases of farming.

Too often we have confused farm shop work with farm mechanics. Instruction in farm shop work should include most of the manipulative activities and is basic to all the other areas of farm mechanics. If the manipulative abilities such as welding, soldering, cold metal work, and woodwork, are not developed in the farm shop program, an effective farm mechanics program in the other areas is almost impossible. The minor breakdowns on farm machinery can usually be repaired by welding, bracing with cold metal, woodwork, or soldering. But, if a farmer does not know how to perform this work the repair is not made and it is only a matter of time until a major breakdown occurs. This usually means a large expenditure of money, loss of time, and perhaps loss of some of the crop. The manipulative skills in farm shop work mean little unless they enhance the work in the other areas of farm mechanics. For example, instruction in electric and acetylene welding should aid in maintaining farm machinery; and instruction in selecting lumber, hardware, and supplies should aid in maintaining buildings and equipment.

In planning local teaching programs in farm mechanics the teacher must know the needs of the farmers in his community as well as the general needs in farm mechanics. Too often the farmer does not recognize the need for maintenance and repair until an emergency occurs. We need to teach the farmer to recognize the need for maintenance and repair and to develop in him the ability and desire to perform the unspecialized maintenance jobs before they become emergencies. If we could accomplish this goal in our teaching, most of the emergency jobs could be eliminated. This in turn would go a long way toward eliminating the stigma of *service* that some have attached to our farm machinery classes.

A large number of teachers have successfully used the following procedure with a farm survey in determining needs and planning their local farm mechanics programs.

Conduct a field trip to a student's home in September with each class.

Previous arrangements should be made to have all members of the boy's family present if possible.

With the teacher acting as leader, have the students and family list the jobs needed on the farm and in the home.

Take one farm machine as an example and list all the jobs needed to put the machine in good condition.

Make every effort to get the parents and students to recognize and name the jobs.

Have each student list the jobs on a form prepared for the field trip.

Emphasize that the purpose of the field trip is to learn how to find farm mechanics jobs that need to be done to keep the equipment in good repair.

On the day of the field trip, give each student another survey form; this one to be used on his home farm the same evening. Have each boy get the assistance of his family in making the survey.

On the next school day, have the students classify the farm mechanics jobs found on the field trip according to: section of work, which member of the family will do the job, whether it will be done in the home farm shop or school shop, and the year each job will be studied and carried out.

Assist each student in classifying the farm mechanics jobs he found on his farm.

Have each student arrange the jobs by sections of work (tool fitting, cold metal, etc.); listing the simple jobs first.

Have each boy check the jobs he has listed under each section of work to see what basic skills are required in doing the jobs.

With the assistance of the students, make a yearly farm mechanics program for the student that was visited by the class.

Have each student make an annual program for his jobs.

Decide with the students what other farm mechanics jobs should be studied each year.

With all students participating, make an annual farm mechanics program for the class.

Explain to the class that each student will complete as many farm mechanics jobs as practicable under each section of work the first year and then start from there the next year. The list of jobs should be revised as often as necessary and at least at the beginning of each year.

Let the students help decide the equipment and supplies that will be needed. Suggest sources where they can secure some supplies, such as old silo hoops, wagon tires, and old metal that can be found on most farms.

Decide with the students what procedures will be used relative to:

Use of equipment
Cleaning up the shop
Using references
Demonstrations
Changing sections of work
Supplies
Safety procedures in the shop
Grading
Management responsibilities

A farm mechanics program that is not an integral part of the total vocational agriculture program and is not based on the farmers' needs and does not make a contribution toward attaining the primary objective of vocational agriculture has no place in our program. But, if the actual needs of the farmers are determined by a farm survey or by some other method and sound practices are followed in developing a local program based on these needs, and if it is executed with good organization and teaching practices there should be no doubt of its value to the all-day students, young farmers, and adult farmers in the community.

The following questions were adapted from a U. S. Office of Education report by A. H. Hollenberg. If your farm mechanics program is well planned and conducted you should be able to answer all of the questions in the affirmative.

Do I have a farm mechanics program outlined for the year ahead?

Did the students help plan the program?

Are the mechanical activities a part of the students' farming programs?

Does the instruction in farm mechanics enhance the farming programs of students of vocational agriculture?

Do the students apply the instruction gained at school on their home farms?

Is instruction in farm mechanics integrated with the total vocational agriculture program?

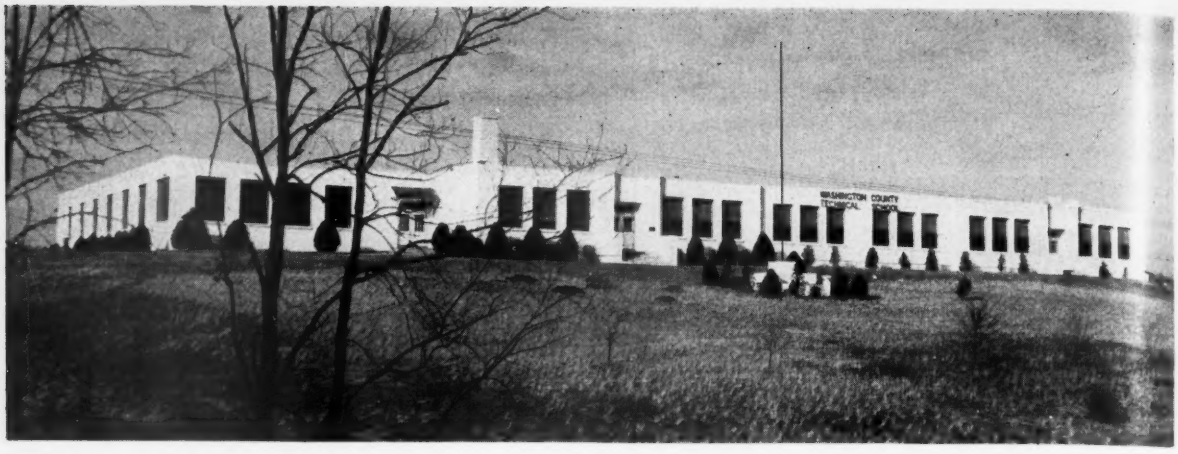
Is the instruction in farm mechanics practical?

Does the instruction in farm mechanics meet the need of the farm work in the community?

Is the instruction based on actual farm jobs?

Are there adequate facilities (space, tools, equipment, and supplies) for giving instruction in farm mechanics?

Do the students use references in performing their farm mechanics jobs?



this is the school

THAT STUDENTS BUILT!

WASHINGTON COUNTY is one of the largest counties in Virginia. It supports 12 high schools offering the traditional college preparatory courses, supplemented by agriculture courses in four schools. In 1938 these 12 schools graduated 227 students of which 49 were reported as going on to degree granting colleges and 31 to trade schools or business colleges.

Industry of various kinds was settling in the Southwest Virginia area. Mechanics to man these industries in the building and machine trades were being imported; secretaries and bookkeepers were recruited from out of town. Native young men and women, if they secured employment at all, were employed to perform unskilled jobs of manual labor.

The school board of Washington County sensed this situation and decided to do something about it. They thought a vocational school would partially solve the problem and appropriated $4,000 to purchase eight acres of land and $20,000 to erect a building, using W. P. A. labor. The school board employed a principal, J. D. Hopkins, who was a teacher of electricity in the Roanoke schools, and also one teacher "in case he was needed."

Some members of the school board were skeptical of the success of such a school and felt that they had overbuilt. "If 20 students enroll we will be lucky," said one member of the board. In 1938 when the school opened 85 students enrolled.

Since no school bus service was available students got to the school the best way they could—by hitchhiking, on bicycles, car pools, commercial bus lines, or even by walking several miles. This was sufficient evidence that the young people of the area wanted a practical type of training.

With an initial enrollment of 85 students it was soon felt that the building which contained only one shop and two classrooms was entirely too small. Money during the last years of the depression was scarce, but Mr. Hopkins said that if the school board would purchase the materials he would give the building trades students some practical instruction by building the necessary additions. The school board accepted this proposition and, assisted by a small appropriation from the State, authorized the purchase of the material. This was the start of a building program that has been in constant operation to the present time.

All building additions were designed by the principal and faculty of the school. The drafting students drew the plans and wrote the specifications and all work in masonry, plumbing, carpentry, electric wiring, welding, concrete, pipe fitting, cabinet making, roofing, and glazing, including the fabrication of steel, was performed by students under the supervision and guidance of the instructors of the respective trades.

All told, six wings and a heating plant have been built, increasing the floor space of 3,700 square feet in the original building to over 30,000 square feet in the present buildings. The estimated value of the buildings and equipment is over $750,000.

By Dr. B. H. Van Oot
Virginia State Supervisor of Trade and Industrial Education

When the school opened in 1938 the faculty consisted of the principal and one teacher who was employed to teach carpentry. Today the faculty consists of the principal, 14 full-time instructors, and a secretary. Part-time instructors are employed at intervals to give special types of training requested by cooperating industries and agencies.

At the present time the school offers instruction in automobile repairing, automobile body and fender work including refinishing, carpentry, plumbing, machine shop practice, electronic assembly, railroad telegraphy, drafting, cosmetology, business practice, including bookkeeping and stenography, welding, bricklaying, concrete finishing, concrete and cinder block laying, motor repairing and electric wiring, armature winding and cabinet making. When the addition now under construction is completed sheet metal work will be added.

Just prior to World War II the vocational schools throughout the nation were called upon to train many defense plant workers. The Washington County Technical School came to the front during this period. Additional floor space and a large quantity of equipment were provided. Several new courses were added with the main effort being placed on training aircraft workers, welders, machinists and sheet metal

workers. Approximately 1,000 workers received special training in these trades. Trainees were secured, tested and screened by the Virginia State Employment Service and after completing their training the Employment Service placed them in employment.

Immediately after World War II many veterans sought entrance to the school. To accommodate these veterans who could not be entered in the regular day time classes an additional shift lasting from four o'clock in the afternoon until midnight was operated. Since there were no restaurants in the immediate neighborhood of the school, a cooks and bakers school was organized in which the students learned the art of cooking and baking, and operated a cafeteria for the benefit of the students and faculty.

The school was a great convenience for veterans who wished to take advantage of their education entitlement to learn a trade. However, a recent ruling of the Veterans Administration prohibiting veterans from attending courses in which they received instruction on "live work" such as buildings of a permanent nature, discouraged many of the veterans enrolled in courses in bricklaying and carpentry, which of necessity had to be learned on permanent construction, and caused many of them to withdraw from the courses. Courses that were taught in the shop buildings such as machine shop work, electronics, etc., were approved by the Veterans Administration.

When the vocational school was being operated high school students received shop instruction for only a half day each. This caused them to return to their home school for the other half day. This arrangement proved unsatisfactory inasmuch as students lost considerable time going from their home school to the trade school and returning to their home school. This is now corrected. Junior and senior students in the high schools now can pursue courses in English, history and government taught at the vocational school, thus permitting them to spend the entire day at the vocational school and at the same time earn enough high school credits to graduate from their home school.

The school board of Washington County cooperates closely with industries and agencies in Southwest Virginia and Eastern Tennessee. Students who expect to enter the technical school are tested and screened by Virginia Employment Service located at Bristol and appropriate courses are recommended for each student according to abilities and interests. Further, the industries in this area which desire their workers to acquire specific skills or technical knowledge either before or after employment call upon the technical school to teach these skills or technical knowledge, mathematics, science and blueprint reading, either in the day time schools, or in the trade extension courses taught at night time.

The program of instruction at the technical school is quite flexible and adaptable to students who find themselves in a classification other than high school students. High school graduates, out-of-school youths, veterans, or adults can find at the vocational school courses that will either prepare them to advantageously enter a trade or increase their skill and technical knowledge if already employed. The basic policy of the school is to take students where they find them and take them as rapidly and as far as they can go in the time they are at the school.

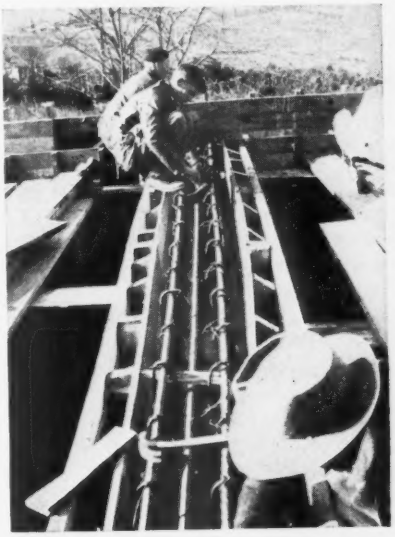
For instance, an auto mechanic finds he needs instruction on testing devices or carburetion or the electrical system. Such a person can attend the school and get the particular type of instruction he needs without pursuing the entire course in auto mechanics.

The Washington County Technical School is operated by the school board as a part of the regular public school system supported in part by State and Federal funds appropriated for the salaries of instructors. All students must be at least 16 years of age. There are no geographical limitations.

Students who are under 20 years of age and live in Washington County do not have to pay tuition charges; those who live outside of the county are charged $25 per month. For persons over 20 years of age the charge for tuition is $30 per month, except those in courses partially financed by State and Federal funds, in which case the tuition charge is $15 per month.

The cost for text-books varies with the type of trade being taught but averages about $15 for any one person. The school does not provide dormitory facilities but board and room may be secured in the town of Abingdon. Upon the completion of any course the student is awarded a certificate of proficiency.

The supply of skilled workers in Southwest Virginia is rapidly being increased. The technical school is an important factor in training these workers.



Future craftsmen learn to re-enforce steel.

Students building a new heating plant.

Assembling electronics devices.

Applying a 5 ply built up roof.

Industrial Arts Instructors—

The JOURNAL Announces An Exclusive New Series

FOR YOU!

SEVERAL WEEKS AGO a committee meeting held in the AVA offices in Washington resulted in an idea which (ready or not) we make so bold as to announce herewith. The idea is to make the JOURNAL as helpful and as practical as possible to individual industrial arts classroom teachers. This idea in itself is not new, of course, but we hope you will find what we propose to do both interesting and helpful.

As you read these pages, some of your teaching brothers are searching the published works of many persons for ideas and help in lesson planning. We think it is time for us to get into this act. What could be of greater interest (not only as a source of direct help but even as a basis for serious argument) than complete unit lesson plans exactly as classroom teachers present them to their classes?

We propose to present such plans in the pages devoted to industrial arts in this JOURNAL. The enthusiastic reception of the *Guide to Improving Instruction in Industrial Arts* gives us a natural place to start with this problem, as the *Guide* outlines very well the content for the areas of industrial arts.

We hope to have for you a series of articles tailored for the industrial arts teacher on the firing line and based directly on the content of the *Guide to Improving Instruction in Industrial Arts.* Each article will be written by a teacher for teachers. With emphasis on the practical side of teaching, the material will be designed to show and to tell teachers what can be done in the shop and draft room when Monday morning comes. Drawings, sketches, and photographs will be included exactly as a successful teacher presents them.

William R. Mason Newly Appointed Industrial Arts Editor for AVJ.

The complete teaching plans will include:

- *Suggested methods for designing*
- *Using sketches to illustrate ideas*
- *Planning a project in woodwork*
- *Planning a project in metalwork*
- *Experiences in electricity*
- *Experiences in graphic arts*
- *Developing projects in transportation and power*
- *Planning a project in plastics*
- *Planning a project in leather work*
- *Creative experiences in ceramics*
- *Creative experiences in textiles*
- *Planning a unit in home mechanics*

Now, are you a successful teacher in a high school or junior high school shop? If you are too modest to admit to successful teaching, do you know a brother teacher who is? We will welcome your help, especially if you have practical lesson material that has been used in class successfully, and follows the new bible for industrial arts teachers, *A Guide to Improving Instruction in Industrial Arts.*—WILLIAM R. MASON.

EFFECTIVE WITH THIS ISSUE of the JOURNAL, William R. Mason, Supervisor of Industrial Arts, Cleveland, Ohio, begins his new assignment as JOURNAL Editor for Industrial Arts. Mr. Mason served as Chairman of the Shop Planning Committee that was appointed by the Industrial Arts Policy and Planning Committee to produce a series of articles for publication in the JOURNAL on school shop planning. The series, announced in the February, 1953 issue of the JOURNAL, continued in subsequent issues and was concluded with *Check List for School Shop Planning,* by Welcome E. Wright, Head, Industrial Education Department, East Texas State Teachers College, Commerce, Texas; and L. G. Wines, Supervisor of Vocational Instruction, Department of Corrections, California Institution for Men, Chino, California (October, 1954 JOURNAL, pages 21-24).

Committee members who served with Mr. Mason to develop the shop planning series were: John Hurley, Supervisor of Industrial Arts, New York City Board of Education; James Hammond, Director of Industrial Arts, State Teachers College, Fitchburg, Massachusetts; and G. Wesley Ketcham, Connecticut State Supervisor of Industrial Arts.

As JOURNAL Editor for Industrial Arts, Mr. Mason succeeds Dr. R. Lee Hornbake, Professor, Industrial Education, University of Maryland. Dr. Hornbake served as a member of the JOURNAL Editorial Board, representing Industrial Arts, for a 3 year term.

A distributive education teacher?

What's that??

"A DISTRIBUTIVE EDUCATION TEACHER? What's that?" You'll hear that frequently, depending upon whether or not it's new to your community or how good a job of advertising your predecessor did. You know, but how do you go about letting others know?

Before you make your teaching plans for the new semester your first job is to find out how well informed are your school officials, the business men, the parents, students and general public. Whether you realize it or not you are going into the fields of promotion, public relations and personnel management.

Your first job should be that of inquiry. In the above named order, you should talk to the people with whom you must work, then map your campaign according to what your survey shows. If it is a new program in the school, your job will in many ways be more difficult, but the success or failure will be yours and not affected by the results of anyone who has gone before you.

After several years in this field, and always following someone else, I envy those of you who are starting with a fresh sheet.

The first and, in my mind, most important step, is to fully explain your program and plans to your school officials and business men. Contact the most influential business man or organization (in most cases this will be your Chamber of Commerce or some other merchants' association), and arrange a meeting with these business men and school officials. Before this meeting have a talk with the superintendent and principal, explaining the program that you hope to accomplish. Get their viewpoints. Ask one of them to introduce you at the joint meeting. Here again explain all phases of your program and solicit their cooperation. How successful a program you have will depend almost entirely on how well the joint group understands what you are doing and how well they cooperate with you. Now would be a good time to start the ball rolling toward organizing an advisory committee to help you during the coming year. In other words your first big job is that of *selling*.

Your next step will be that of informing your students and their parents of the different phases of distributive education and what part each plays. Many of your student management problems will be solved if the parents also understand and cooperate. You may choose to visit the home of each prospective student. If the community is small enough to make this practical, it establishes an excellent relationship and at the same time gives you a chance to obtain some of those much needed *background facts*. If the size of the community does not make this step feasible, your alternate plan would be that of meeting with all parents and students at the school or some other centrally located place. Make it an informal meeting with light refreshments afterwards. Get your principal to assist in explaining the program and the regulations that may affect the students.

By this time you should have laid a firm foundation upon which to build your year's work. The next group to whom you should talk and look for understanding is your fellow teachers. Here again your principal can pave the way by permitting you to talk at a faculty meeting. When they know what you're doing and understand the kind of students you would like to have, they will be excellent recruiters for you. They will send you students to interview for the following year. They will be more cooperative with you and the students now in the program.

As the year gets underway you will be meeting more and more of the general public who know little or nothing about distributive education. In order to reach as many of these people as possible, you should become affiliated with local religious, service and social groups. Make talks to these and as many other clubs as possible.

If you have a local radio and/or TV station, arrange for time to tell about the distributive education program. Use students on these programs. Talk about the things they are accomplishing. Contact the local newspapers and have frequent items about the program and the Distributive Education Club in these publications.

Another very important group is the high school student body. There are so many different ways you can publicize your program to this group. Here are a few suggestions: Place posters on bulletin boards—they can be about some field of study the DE class is covering. Keep a display case in the hall decorated with merchandise the students are selling. Have assembly programs; run campaigns of one kind or another; have DE students take part in as many activities of the school as they have time for and be sure to keep articles about the program, the club, and the students in the school paper.

All this is a big order, but you can't stop here. You must also be as active as time and energy permits in other school activities. Your first year will be the most demanding of all your years of teaching, but if you lay your ground work well the succeeding years will reward your efforts.

By Nellie Lee Kitchen
Supervising Coordinator
Distributive Education
Roanoke, Virginia Public Schools

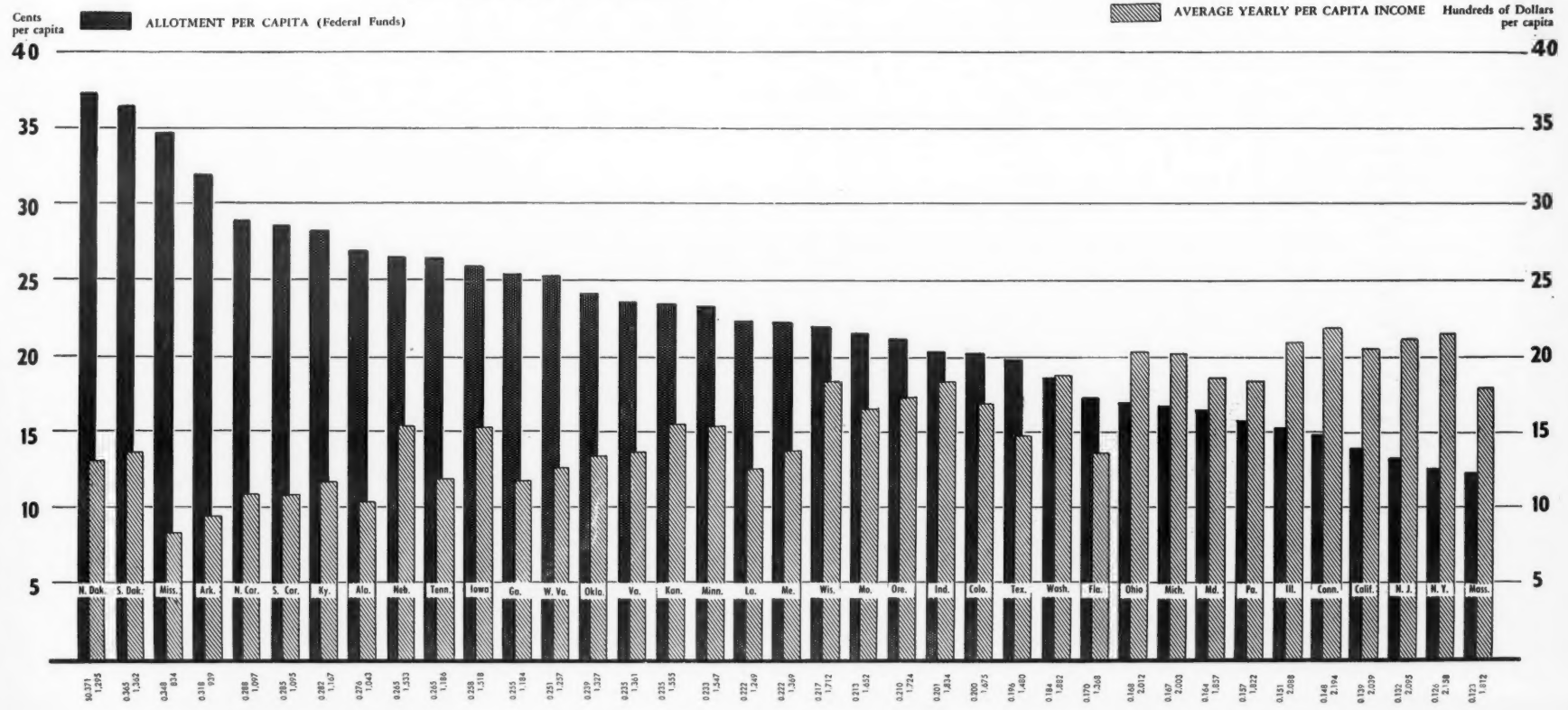
Comparison of Average Per Capita Incomes with Per Capita Receipt of Federal Vocational Funds Appropriated to Carry Out Provisions of Smith-Hughes and George-Barden Acts, 1955

This graph shows the relationship of the average per capita income of the people of the several states to the amount of federal vocational funds made available per capita under the current George-Barden ($23,673,261) and Smith-Hughes ($7,273,330) vocational appropriations.

It clearly shows that the states with the lowest average per capita incomes receive the largest amounts per capita of federal vocational funds. This means that federal funds under the provisions of the Smith-Hughes and George-Barden Acts go in larger proportionate amounts per capita to states that are less able to develop and maintain programs from their own resources. A reduction of federal appropriations for vocational education would therefore hurt most where the need for assistance is greatest.

For example, the average annual per capita income in the State of Mississippi, according to the U. S. Department of Commerce, is $834, and the per capita receipt of federal vocational funds is $0.318. In New York, the average annual per capita income is $2,158 and the per capita receipt of federal vocational funds is $0.126.

States receiving minimum or near minimum allotments (less than $153,000) of federal funds are not included in the graph because they are not receiving appropriations on a comparable basis with other states. The minimums were established on the theory that Congress would appropriate the full $36,585,122 authorized by the vocational education acts.



When you plan a home making conference

. . . . remember the person who won't be there!

THE MOST IMPORTANT PERSON at your homemaking conference is very often a ghost—a person who isn't there, but who is going to be affected by your conference. Those who *are* there must find your program so sparkling and alive, so helpful and interesting that they can take enough of it back to make a real difference where they live and work. Supervisors want something to take back to teachers. Teachers come in search of ideas that will make a difference to the folks down in New City or over the mountain in Booger Hollow—boys and girls in their high school classes, mammas and papas who want help with homemaking, fellow teachers who didn't get to the conference, principals back in their schools.

The buttons you punch at the conference should light up things way back in all those classrooms, communities, homes. Are your conference ideas and programs vital and contemporary enough to do that?

Many conference programs are. Others are dishwater dull, not worth coming to. Pearl Buck says, "I doubt that the program planners know how important they are. Every hour that people are willing to give to a conference or a meeting in these days must be well-planned and interestingly presented. We moderns have no time to waste. There is little time left in the world."

We recently collected—for this report to you—programs of 40 state homemaking conferences, from Maine to Arizona, from Puerto Rico to North Dakota, from Alabama to Oregon. Their ideas may give *you* ideas.

1. Are Your Programs Eye-Taking? Make your printed programs attractive to look at. How attractive is your conference program? The same old deadly white mimeographed sheet with no eye appeal? Or have you dramatized and colorized it to attract attention? Arizona's program was the most beautiful of the 40. Printed in green ink on white paper, it was enclosed in a heavy green back, decorated with gold pine cones. Another attractive program was that of Kentucky, printed in black on yellow with pen sketches of pots, pans, and cook books, and titled *What's Cooking at the State Conference?* North Dakota had a rainbow program with the best *index* of the lot, designed for quick finding-out about plans and personalities. Theme of several conferences was "There Is No Learning Without Participation." One theme: "Let's Do It the Modern Way!"

2. Write Like You Talk. Get away from educational jargon and high sounding words. Instead of "An Analysis of the Evaluation," put "What We Thought About the Conference." Instead of "Demonstrations for Work Simplifications," why not "How To Do It Quicker"? Some peppy titles in these latest programs were these: Fall of the Gavel. . . . Let's Use Modern Methods. . . . Getting Along With Yourself and a Million Others. . . . This We Believe—This We Can Do in Homemaking. . . . Cutting Cooking Capers. . . . The Magic of Spices. . . . Do It Yourself With Styrofoam. . . . Do's and Don'ts of a TV Show. . . Five Rules for a Happy Home. . . Pots, Pans, and Personalities.

3. Plan Something Besides Homemaking Topics. Some alert planning committees made their programs richer by inviting congressmen, diplomats, and governors to talk about the world situation or new laws Congress has enacted. (This has a two-way value. These alert speakers *bring* something to you, *get* more understanding of your program and your problems.) In many programs, teachers gave reviews of fine books, fact or fiction. Some gave teachers free time to attend drama festivals, symphony programs, and art shows going on in the conference community. Utah had a picnic at the canyon. Georgia had its conference at camp, where teachers could swim, hike, relax.

4. Try Shifting Your Conference Dates. Do you *have* to have them at the same time every year? Vermont tried September. One comment: "Let's have it in the fall again! Then we can use our new ideas immediately."

5. Use Your Native Resources. Puerto Rico, which has study groups, does much to help teachers use native resources and learn native arts and crafts. Many states find enthusiastic response when they plan conference demonstrations by skillful people who can show teachers how to make the most of native plants, trees, seashells, driftwood, clays, rocks. One state exhibited native crafts and know-how under the big sign "See It, Make It, Use It."

6. Find Out What They Think About Your Conference. Will teachers tell you truly, or are they polite and evasive? Arizona's evaluation sheet says frankly, "No salami, please!" Most states beg teachers not to sign their names. Most effective evaluation seems to come from listeners who eavesdrop and report sprightly anonymous quotes. New lines on evaluation sheets these days: "Did you make friends here? Did you take part in this conference? Do you like being a homemaking teacher more or less than you thought you would?" One state had a big feature titled "What We Did With Your *Last* Year's Suggestions." New Hampshire called in college people, homemakers, mothers and fathers to tell what they expect from the modern homemaking program. One state had a high school girl talk about what a 10th grader expects to learn in her homemaking class.

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7. Trends. Many oldies are still popular on the program, some dressed up in new words, like, "Food Men Like," "Fabrics That Make You Fashionable," and "Trends in Textiles." But there are *new* trends in topic-picking, too. Home furnishing now shares the spotlight with *housing* problems that have economic and sociological meanings.

Role-playing, socio-dramas, and skits, especially those showing family relationships, are on more and more programs. Many use professional dramas such as the "Temperate Zone Plays" produced by the National Committee for Mental Hygiene, 1790 Broadway, New York 19, New York. Mental health has a high priority on conference programs. . . . Buzz sessions are everywhere and group dynamics are the order of the day. . . . Child guidance topics appear on about 1/3 of the programs (an especially good one in Louisiana). . . . Equipment, especially deep freezes, is still a popular topic. . . . School-building programs going on over the country have teachers busy planning new homemaking departments. That brings such program topics as "How to Work with Architects". . . . Home projects are still a big part of teachers' days. Some list these on programs routinely, just "Supervising Home Projects." Other creative minds, remembering the miles it takes to see them all, list it this way: "She'll Be Coming Round the Mountain," or "Turn Left at the Old Grey Oak," or "Who's That Knocking at My Door?".

Nevada reports, "Our teachers like workshops which are down to earth and practical. They want something they can use immediately in their situations." Vermont adds, "Their interest in 'Sit-and-Listen' sessions is limited. They are interested in a conference that gives them something of practical and immediate value for their teaching."

8. How Many Share in Your Program? The old idea of letting a few people run the conference is as out of date as grandma's bustle and the Model "T". Nowadays, the more, the merrier. Group dynamics and other modern vitalities have brought in scores of people to take part in conferences. There are group leaders, hostesses, resource people, presiding officers, social chairmen, recreation planners, and writers of thank-you notes. In a hundred and one ways they are given things to do, needful things, not just busy work. Each finds a new stature and a new dignity; each feels more keenly that the program is hers. One state added pep and sparkle by taking its programs and writing little personal notes on copies for each person who would be in charge of a program feature. Notes like this to someone presiding just before lunch: "I know this comes when they're all tired, but you are just the one who can pep it up and keep them listening."

9. How Do You Publicize Your Conference? Many states featured public relations as a conference topic. Newspaper editors, radio and TV directors came in and talked about how to tell the world what's going on in homemaking education. Some had speech experts train teachers who need to speak to the Rotary Club at Possum Trot and the Ladies Aid in Cityville about vocational education. Curiously enough, none of the programs report any plans for publicizing the conference itself through local papers, TV, or radio. Pennsylvania reports a very fine demonstration program on television, which was itself televised and followed by four TV workshops for teachers in various parts of the state. One local TV program is *The How Show;* another is *Tales Out of School.*

And finally—if you have planned well, your conferences will generate excitement. Fresh winds will blow through the minds of those who are there. They will go home with new energy and new ideas that will lend perceptivity and depth to the homemaking program. Then all over the land, in hill and hollow, city and crossroad, the homemaking program will become more and more a rich and vital part of contemporary living.

Plan, therefore, your conference program not only for those who will be there, but for those who will *not* be there. The real test of whether yours is a good conference is whether it makes a difference to the folks back home.

Did your *last* conference? Will your *next?* What do you think?

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Is there a dual program?

Captioned *"Whither Secretary Benson? —a dual program of rural education?"*, the following appeared in the November 15 issue of the Educational Press Association's NEWSLETTER, a National publication:

"Vocational educators are concerned over the fact that the Secretary of Agriculture Benson is building up an educational program through his extension service in direct competition with the regularly—constituted vocational agriculture programs of the public schools.

"During the past 12 months Secretary Benson has obtained from Congress additional funds to increase the number of extension agents to perform functions which more properly belong in the public vocational schools.

"Educators in Washington point out that what is needed is a conference between the Secretary of Agriculture and the U. S. Commissioner of Education to assure that their efforts do not conflict."

Editor's Note: There should be no conflict between the agricultural extension service and vocational education in agriculture. There is need for both programs. Secretary Benson has taken a very positive, aggressive and successful stand in his efforts to obtain additional federal funds for the agriculture extension service. At his request, the appropriation was increased by approximately $8 million for fiscal 1955. There is a rumor that another increase will be requested for fiscal 1956. We would like to see U. S. Commissioner of Education Dr. Samuel Brownell and the Hon. Oveta Culp Hobby, Secretary, Department of Health, Education and Welfare, take a similar stand to increase federal funds for vocational education. Both of these programs are educational in nature. Both should be governed by the same policy and have the support of the federal government.

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GENERAL ELECTRIC

There's a rustle of excitement and music in the air

—and your AVA Washington Staff feels that Christmas, surely, will soon be here. It pleases us to know that once again we may wish for AVA members—

A Happy Holiday Season

Teacher-student teams share in $50,000 awards program!

Ronald Goyke (right) shows his Outstanding Achievement Award-winning buffet table to his instructor, Mr. George Robertson (left), and Mr. Dewey Barich, Ford Motor Company official. Goyke and Robertson were among 31 top-winning teams in the 1954 IAA program.

DETROIT, November 10—"Teachers did a wonderful job in making our 1954 Industrial Arts Awards program, the most successful in its 8-year history," said Dewey Barich, manager of Ford Motor Company's Educational Relations Department.

"Of the over 20,000 student-made school projects judged regionally," Barich continued, "a total of 5,039 were received in Dearborn for the finals. Quality of craftsmanship was the finest we have seen. The use of greater imagination was especially evident."

Barich explained that 31 teacher-student teams, winners of Outstanding Achievement Awards, enjoyed an all-expense, 3-day trip to Detroit and Dearborn, Michigan as guests of Ford Motor Company. Highlighting the trip was a tour of Ford's famed River Rouge plant, followed by the Annual Awards Banquet, with well-known educators and industrialists in attendance. During September and October, 712 students in all sections of the nation received cash and other awards valued at $50,000.

"There's no better measure of IAA's success than the enthusiastic reports we get from teachers themselves," said Barich. "Students seem to delight in competing with others their own age from all over the country. Teachers say that IAA provides strong incentive for better schoolwork, too."

Plans for the 1955 IAA program are now underway. Information regarding eligibility and project classifications is available by writing Industrial Arts Awards, Ford Motor Company, 3000 Schaefer Road, Dearborn, Michigan.

A

Association News and Personals

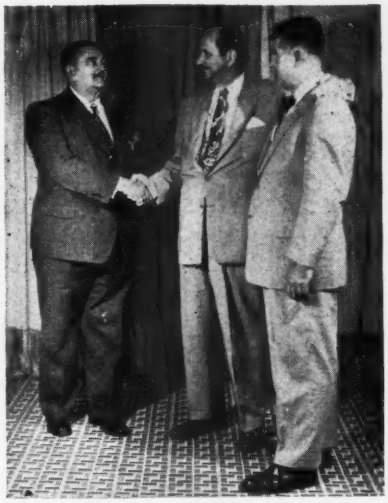
● **The Puerto Rico Chapter,** American Vocational Association, held its 20th Annual Convention October 23 and 24.

Dr. M. D. Mobley, Executive Secretary, American Vocational Association, addressed approximately 1200 vocational leaders October 22. His topic was, *Education to Preserve Freedom and Security*. Dr. Ramón Mellado, Acting Chancellor, University of Puerto Rico; Mrs. Felisa Rincón de Gautier, Mayor of San Juan; Attorney Virgilio Brunet, President, Puerto Rico Teachers' Association; Ramón Garcia, Superintendent of Schools of Río Piedras; and Beresford S. Davis, FOA student from Trinidad, delivered addresses. Mariano Villaronga, Secretary of Education, spoke about the development of vocational education in Puerto Rico during the last 6 years.

Dr. Pablo Roca, Director of the Technical Division of the Department of Education, presided over a panel discussion on *The Relationship of the Economic Future of Puerto Rico to the Program of Vocational Education*. Participants in this panel were: Hon. Ramón Colón Torres, Secretary of Agriculture and Commerce; Cándido Oliversas, Economist of the Puerto Rico Planning Board; Jorge L. Otero, Director of Apprenticeship, Department of Labor; L. García Hernández, Director of Vocational Education; and Manuel Rivera Matos, Public Relations Officer, Puerto Rico Economic Development Administration. Professional meetings were held by the respective sessions of the Vocational Education Division.

A dinner-dance honoring Dr. and Mrs. Mobley; Frederick Dixon, Director of Education in the Virgin Islands; and Raphael Wheatley, President of the AVA, Virgin Islands Chapter, was held October 23.

Enrique Irizarry was elected President, Luis Lozada, President-Elect; Antonio Figueroa, Vice President; Pedro J. Torres Virella, Secretary; and Pío A. Torres, Treasurer.



Enrique Irizarry, new PRVA President (l.) is congratulated by Director L. Garcia Hernandez and Past President Francisco R. Nunez at the Puerto Rico meeting.

Dr. Mobley toured the industrial arts shops and home economics department in the Vega Baja Schools, a Rural Second Unit in Mora, Isabelo, and the vocational schools of Ponce, Mayaguez, and Río Piedras.

Francisco R. Núñez, President AVA, Puerto Rico Chapter, presided during the convention.

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● Dr. Kenneth Zimmer of the Richmond Professional Institute was elected President of the **Virginia Business Education Association** for 1955 at the fall meeting of the Association held in Richmond, Virginia, on October 29.

At the Iowa Voc'l Assoc. Convention, l. to r.: Louise Keller, AVA VP for HE and Iowa State Supervisor; Mark Nichols, AVA President; John Bell, Pres., IVA; Ralph Gruenwald, Past Pres., Iowa Vocational Ass'n.

Sara Anderson of Montevideo High School and Madison College was elected First Vice President and John Eaves of Cradock High School was selected as a member of the Nominating Committee of the Virginia Vocational Association.

Elected to the Board of Directors for 3-year terms were Louis Aprahamian, Danville Technical Shcool; Ernest G. Baxa, George Washington High School; Mrs. Mary G. Goodling, Louisa High School; Wilma Allen, Martinsville High School; Grace Herr, Harrisonburg High School; Mrs. Mary B. Barlow, Varina High School; Mrs. Frances Haynes, Highland Springs High School; and Mrs. Leo H. Smith, Christiansburg High School.

Highlighting the general session held in the Federal Reserve Bank Auditorium was a talk by Dr. Dorothy H. Veon, one of the outstanding women educators in business education, on *Business Education Finds Its Place in International Affairs*. Having been a delegate for the International Society for Business Education at Switzerland in 1948 and in Italy in 1953 and just returned from South America, Dr. Veon related various experiences and proposed a progressive movement in business education.

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● **Jacob Spies,** Director, Sheboygan, Wisconsin, School of Vocational and Adult Education, was honored recently by his colleagues and friends on his completion of his 30th year of association with the school he directs. The occasion was marked by a surprise testimonial dinner and social, with John Te Poorten, Coordinator, Wisconsin Vocational Schools, as toastmaster. One of the evening's highlights was the presentation of an AVA Life Membership to Mr. Spies by Wisconsin State Director of Vocational and Adult Education C. L. Greiber.

Director of the Sheboygan school on a full time basis since 1943, Mr. Spies joined its faculty in 1924 upon his graduation from the University of Wisconsin.

• • •

● Mark Nichols, President of the American Vocational Association, addressed the Annual Meeting of the **New Mexico Vocational Association** at Albuquerque, New Mexico, October 28.

Mr. Nichols stressed the importance of vocational education in our educational system and the necessity of instructors doing a better job in preparing youth to take their place as citizens in this complex world.

Mrs. Paul W. Chapman and Georgia's Past President, FFA, stand before the portrait of the late Dean Paul W. Chapman, College of Agriculture, University of Georgia, after unveiling ceremonies held at the annual conference of vo-ag teachers in Georgia last August. Dean Chapman's picture will be placed beside those of Dr. John T. Wheeler and L. M. Sheffer in the Mobley Hall auditorium, part of the Georgia State FFA Camp.

New Mexico VA officers, l. to r.: Ray Deming, Pres.; Al Meador, Past Pres.; L. E. Dehner, VP; James Peterson, Sec-Treas.

Jessie W. Harris (l.), Vice Dean, College of Home Economics, Univ. of Tennessee, is presented with a $200 FHA scholarship check (awarded annually) by Margaret Browder, Tenn. State Supervisor, Home Economics, in behalf of Tennessee FHA.

M. Reed Bass Retires

M. Reed Bass, who has headed the David Ranken Jr. School of Mechanical Trades, St. Louis, Mo., since 1937, retired on September 30. With his voluntary retirement he closes nearly 40 years of active service to vocational education.

As a young man, Mr. Bass gave up a position as a shop foreman in a large automobile repair plant in Minneapolis to go to Dunwoody Institute as an instructor in automobile repair. He headed Dunwoody's automobile department for 2 years and served as principal until shortly after World War I when he was invited to go to St. Louis as Director of the David Ranken school.

During his many years at Dunwoody, Mr. Bass was closely associated with Dr. Charles A. Prosser. He is the author of numerous articles on vocational education and collaborated with Dr. Prosser on a book entitled *Adult Education*. A leading member of many professional organizations, he also served as an active member of the Educational Committee of the Lithographic Technical Foundation and as a Director of the Adult Education Council of Greater St. Louis. For a number of years he was a member of the faculty of the Department of Education of the University of Minnesota as well as that of Colorado State College.

In reporting the retirement of Mr. Bass, the *MIEA Bulletin*, published by the Missouri Industrial Education Association, said:

"Mr. Bass has been recognized by many as one of the outstanding leaders in the vocational education field. This leadership stems from the fact that he is a tireless worker and he has been part of many of the developments in vocational education."

George B. Rodenheiser, Assistant Director of the Ranken School for the past 16 years succeeded Mr. Bass as Director. He took office October 1.

• • •

● Opening of the first unit of the Central Utah Vocational School, Provo, was celebrated with 4 days of open house for the public. Ernest Dean, Supervisor of Industrial Coordination, served as Chairman for the event.

Described by the Utah County Daily Herald as a "magnificent new plant for training in practical living," the Central Utah Vocational School structure is the first unit of what is eventually planned as one of the finest vocational buildings in the west.

Serving the vocational training needs of 4 Utah counties, Central Utah VS has the support and advice of a 22-man advisory board. Equipment valued at more than $225,000 is installed in the building for training needs.

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● The National Advisory Committee of the Distributive Education Clubs of America met in Richmond, Virginia, October 15-16 to outline the year's program of work for the Distributive Education Clubs, and to review the contents of a revised handbook for DE Clubs.

Committee members are Mrs. Mildred C. Cassidy, State Supervisor of DE, Wyoming; Mrs. Helen B. O'Donnel, Assistant State Supervisor, Connecticut; T. R. Petty, State Supervisor, Tennessee; W. G. Slattery, Teacher-Trainer, North Carolina; and Brice W. Cecil, Consultant in DE, Texas. Meeting with the committee was George M. Stone, Executive Secretary of the Distributive Education Clubs of America, Washington, D. C.

The group met at the John Marshall Hotel, site of the Ninth Annual DECA convention to be held in April, 1955. Meeting with the committee for part of the time was a group of supervisors from the host state of Virginia. Louise Bernard, State Supervisor; James C. Horan, Assistant State Supervisor; and Ralph Rush, Richmond Professional Institute, were among those who attended the sessions having to do with the planning of the 1955 student convention. Roy Horton, student president of DECA, who is enrolled in the Richmond Professional Institute, was also present for the planning sessions.

CHARLES A. ROPER

SALESMAN WANTED: This ad appeared in a magazine some 28 years ago. A native of Green County, Missouri, who was teaching Industrial Arts in Nevada, Missouri was interested. He wrote the advertiser and an interview was arranged. Dr. Charles A. Bennett and L. L. Simpson of the Manual Arts Press recognized real professional quality in this man. This was the beginning of the honorable and distinguished publishing career of Charles A. Roper.

His first AVA Convention was in 1926 in Los Angeles. In 1928 Captain Waldo Wright appointed him to *The Ship's* Steering Committee. He was reappointed in 1930 by Captain Ralph Newing.

Charlie was a victim of the depression. A good salesman and a stubborn Missourian, he wasn't whipped. He sold Wm. McKnight, Sr. on the idea that a good salesman could increase his business during the depression. This statement was very true.

As we all know, it wasn't long until Charlie sold Mr. McKnight on the idea that industrial arts books were needed. In 1934 he reported to Captain Paul Crabtree and Deck Officer Dave McCarl at the first Chicago AVA Convention. He arranged with L. H. Dennis, AVA Executive Secretary, for a small table space as Charlie had one industrial arts book to exhibit for the McKnight & McKnight Publishing Company. He was well on his way to another career with McKnight & McKnight that has made history.

Charlie became active in *The Ship's* affairs at once. He was appointed to the Steering Committee by Captain Paul Crabtree. In 1936 Captain Paul Goward appointed him Helmsman of *The Ship's* Steering committee. In 1938 he was elected Second Mate, in 1940 he was elected First Mate, and in 1942 he was elected *The 9th Ship's Captain*. In 1944 at the Eastern and Western Arts convention at *The Ship's* business meeting, it was voted unanimously to retain *The Ship's* officers another year. In 1946 Charlie was appointed Commodore. In 1947 Captain Bert Cholet appointed him to the Steering Committee. He was reappointed by Captain Messmore in 1949 and by Captain Clyde Clack in 1951. In 1953 at the Chicago AVA Convention he was appointed Representative to the AVA by Captain John Guthrie.

Charles Roper wrote the first *Ship's* history; he was the first *Ship* historian. Thousands of copies of the history have been distributed to the membership and educators. His first thought in the business meetings of *The Ship* was that high professional standards be maintained. Charles Roper was outstanding in his many contributions. His friends are in the thousands.

Charlie had completed a successful tour of the Texas Textbook adoptions. Tuesday, October 6th, he received the good news that some of the books he had submitted had been approved by the Textbook Committee. Though very tired, he was very happy.

He met Mrs. Roper in Springfield, Missouri, Thursday, October 8th. They drove to Kirksville, Missouri to visit their grandchildren, daughter, and son-in-law. Saturday, October 9th, he suffered a heart attack and was confined to the Laughlin Hospital. He held his own for several days. Charles A. Roper joined the great Celestial Crew Wednesday, October 20th, at 11:50 P.M. in Kirksville, Missouri. We have all lost a friend who cannot be replaced. We all know that the people of Republic, Green County, Missouri are honored to have their native son resting with them just as we of *The Ship* were honored to have had him with us.—HARRY W. SEARS

From the Office of Education

Dr. S. M. Brownell, U. S. Commissioner of Education, addressed more than 9,500 FFA members and their advisors attending the 27th annual national convention of Future Farmers of America held in Kansas City, Mo., October 11-14. James H. Pearson, Acting Assistant Commissioner for Vocational Education and staff members of the Agricultural Education Branch were in attendance.

• • •

During November and December Howard K. Hogan of the Trade and Industrial Education Branch worked with the State trade and industrial education staffs in Idaho, Oregon, California, and Utah, on the further development of related instruction programs for apprentices and on furthering the utilization of trade and industrial education advisory committees.

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Edna Amidon, Beulah Coon, and Berenice Mallory of the Home Economics Education Branch participated at Washington, D. C., November 19 and 20, in the fourth of a series of meetings to discuss business-sponsored home economics teaching aids. The committee of home economics educators and home economists in business, originally formed on the invitation of Miss Amidon in 1950, was joined by several home economics administrators from land-grant colleges and new personnel from both business and education for this 2-day conference. Problems relating to improving business-sponsored materials for school use, and improving the use of such material by schools, colleges, and others ,were discussed.

• • •

R. E. Naugher, H. B. Swanson, of the Agricultural Education Branch, and Ata Lee, of the Home Economics Education Branch, were in Tennessee during the week of October 25 assisting the State Board for Vocational Education in a study of their teacher training programs in agriculture and home economics.

• • •

James H. Pearson, Acting Assistant Commissioner for Vocational Education, devoted some time during the month of November with foreign educators from Korea and France who were interested in the administration and organization of programs of vocational education in this country.

• • •

G. Henry Richert, of the Distributive Education Branch, cooperated with H. D. Shotwell, State Supervisor of Business Education in Kansas, and Custer McDonald, State Supervisor of Distributive Education in Mo., in the planning of a textile fiber clinic for distributive education personnel. This clinic was conducted November 18-19 in Kansas City, Mo. Distributive education personnel from five States—Missouri, Kansas, Oklahoma, Arkansas, and Nebraska—attended the clinic to receive information, teaching aids, and instructions that will help them to conduct fiber clinics in local communities in their respective States. The following organizations participated in the clinic: The du Pont Company (du Pont family of synthetic fibers); The Wool Bureau (wool); American Rayon Institute (rayon and acetate); Virginia-Carolina Chemical Co. (vicara); Carbide and Carbon Chemicals Co. (dynel); International Silk Association, USA (silk).

Howard K. Hogan has been requested to act as consultant to a committee of the wallpaper industry and the Brotherhood of Painters, Decorators, and Paperhangers of America. This committee is investigating the possibility of enabling painters to become skilled in paperhanging. Intensive courses of instruction in paperhanging would be offered to painters.

• • •

H. B. Swanson of the Agricultural Education Branch has prepared a summary of statements made by 14 foreign visitors showing their reactions to the 1954 national convention of Future Farmers of America. The summary shows the visitors were most impressed by: (1) The student-parent-teacher relationship; (2) cooperation and interest of industrial and business firms, and (3) demonstrated leadership ability of FFA members and officers.

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Berenice Mallory, Assistant Chief, and Margaret Alexander, N. Atlantic Region program specialist, of the Home Economics Education Branch, were in Albany, New York, November 11-13 acting as consultants at the annual fall conference for leaders in home economics education. Participating in the conference were teacher educators, state and city supervisors of home economics, and supervising teachers. The three-day workshop meeting emphasized plans and techniques for working with teachers in pre-service and in-service education programs.

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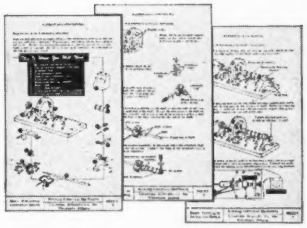

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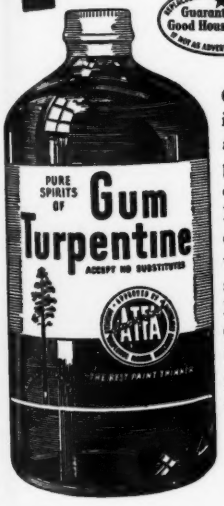

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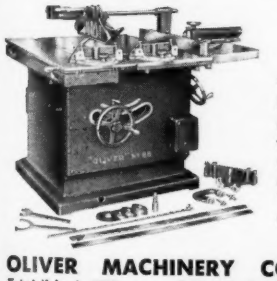

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Books and Bulletins

The Federal Government Service: Its character, prestige, and problems. The American Assembly, Graduate School of Business, Columbia University, New York 27, N. Y., 1954. 180 pages.

Established by Dwight D. Eisenhower while he was President of Columbia, the American Assembly is a national, nonpartisan program of continuing conferences planned to throw impartial light on the major problems that face America so that citizens can take effective steps toward their solution.

* * *

Trains and the Men Who Run Them, by Alexander Uhl. The Public Affairs Institute, 312 Pennsylvania Ave., S. E., Washington 3, D. C., 1954. 100 pages, 50 cents.

Offered as a possible supplemental reader for vocational classes, this book offers complete description of railroad jobs while it examines the role of transportation in current economic life.

* * *

Employment Outlook in the Industrial Chemical Industry (Bulletin No. 1151). 37 pages, 30 cents.

Employment Outlook for Mechanics and Repairmen (Bulletin No. 1129). 30 pages 20 cents.

Employment Outlook in Metalworking Occupations (Bulletin No. 1130) 38 pages, 30 cents.

Prepared by the Bureau of Labor Statistics, U. S. Department of Labor, in cooperation with Veterans Administration, these reprints from the 1951 Occupational Outlook Handbook are available from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

* * *

Factors Affecting the Improvement of Secondary Education (Circular No. 404), edited by Howard H. Cummings, J. Dan Hull, John R. Ludington, and Berenice Mallory. Office of Education, U. S. Department of Health, Education, and Welfare, Washington 25, D. C. 132 pages, 70 cents.

This publication is a condensed report of discussion held in the Office of Education December 7-9, 1953.

* * *

Practical Nurse Training . . . comes of age, by Louise Moore. Office of Education, Division of Vocational Education, Washington 25, D. C., 1954. 18 pages.

Misc. 3468, September, 1954, this bulletin should be ordered from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

* * *

Creative Mechanical Drawing—Basic, by Oval S. Harrison. American Technical Society, 848 E. 58th St., Chicago 37, Ill., 1954. 89 pages, $1.75.

Explanations here are brief and basic principles are designed to avoid confusion for the beginning student. The standards of modern industrial practice have been considered in selecting the problems.

* * *

How to Service Tape Recorders, by C. A. Tuthill. John F. Rider Publisher, Inc., 480 Canal St., New York 13, N. Y., 1954. 160 pages, $2.90.

This book was written with the requirements of widely divergent users in mind. It presents an introduction to the basic principles of magnetic recording as well as practical service information on popular tape machines.

* * *

Careers in College Teaching, Career as Painting Contractor, Career in Plumbing and Heating Contracting, Career as Electrical Contractor, Career as Refrigeration and Air Conditioning Contractor. B'Nai B'rith Vocational Service Bureau, 1761 R St., N. W., Washington 9, D. C., 1954. 20 cents each.

* * *

Business Management—Efficiency Surveys and Systems, by John A. Shubin. Barnes & Noble, Inc., 105 Fifth Ave., New York 3, N. Y. 372 pages, $1.75.

This book offers efficient management methods and is written on the premise that scientific management is best mastered when its principles and techniques are integrated with analytic approaches to all phases of business.

* * *

Cut to Fit, by Belinda Lund. Belinda Lund, Vocational and Adult Education School, Green Bay, Wis., 1954. 23 pages

In her introduction, the author of this handbook says:

"Pattern alterations suggested . . . are those most frequently used in any adult class . . . Procedures suggested . . . have been used, tested, and evaluated by adult students over a 10 year period and have been found to be practical . . ."

* * *

Nutrition Work with Children, by Ethel Austin Martin. The University of Chicago Press, 5750 Ellis Ave., Chicago 37, Ill., 1954. 527 pages, $7.50.

Presented here are solutions to the problems of child nutrition. In addition, the efforts of public and private agencies to raise the general nutrition level of children are described in detail.

* * *

General Education: Explorations in Evaluation, by Paul Dressel and Lewis B. Matthew. American Council on Education, 1785 Massachusetts Ave., Washington 6, D. C., 1954. 298 pages, $3.50.

The word "explorations" in the title of this book suggests the philosophy, the methods, and the results of this 4-year cooperative study conducted by 19 colleges and universities.

* * *

Drafting, by J. W. Giachino and Henry J. Beukema. American Technical Society, 848 E. 58th St., Chicago 37, Ill., 1954. 243 pages.

The material in this text is designed to provide an organized plan of instruction for acquiring the essential elements of drafting.

* * *

Medical Technologists and Laboratory Technicians. Women's Bureau, U. S. Department of Labor, Washington 25, D. C., 1954. 54 pages, 25 cents. (Ask for Medical Series Bulletin 203-4)

This bulletin presents job information and training requirements for medical technologists and laboratory technicians.

WHAT'S NEW?

The Collaro division of **Rockbar Corporation** has just announced a new three-speed fully automatic record changer . . . the Model RC-54. The RC-54 was developed around the same basic features which have contributed so largely in establishing the fine reputation of its predecessors.

Sales Manager Ed Straw states, "The advances made in the RC-54 have resulted in a quality performance never thought possible in a record changer. Improvements have been made which add considerably to the user's convenience. The RC-54 automatically intermixes all size records. 7, 10, and 12-inch records can be stacked in any order of play without any adjustment or pre-setting, provided they are of the same speed. The complete changing cycle takes only six seconds . . . regardless of the speed at which the records are being played. Even operation has been considerably simplified. Only two knobs are used —one to set the speed, and the other for 'on', 'off' and reject. The RC-54 is smaller than its predecessor (12 x 13½") facilitating installation in restricted space, and replacement of obsolete units."

(Check AV-45 on the form for further information.)

• • •

The **Mayline Company** announces an improvement in design and performance of their C-7702 Art Table.

One improvement has been the substitution of a formed steel rod for the former hinged wood elevating device. The new rod will give greater support to the top and assure a firm solid rest. When not in use, it folds back underneath the top.

The second innovation has been a redesigning of the slotted bracket that controls the elevations to which the top can be raised. A scientific study proved that five positions would give the best basic and fundamental drawing top angles. The degree of rise or lowering in the short steps occasioned by a number of slots was found to be so small that the additional slots were of no practical value.

These improvements are in keeping with Mayline's desire to produce products of practical value, designed and constructed with the greatest of engineering thought and skill. They indicate the continued advancement in the position held by the Mayline Company in the field of classroom furniture and equipment.

Small items such as triangles, pencils, brushes, paints, erasers, etc., are held in place on the drawing board by a hardwood ledge strip. These items can also be sorted in the handy tool drawer at the right side of the table when not in use. The table is constructed of oak and the finish is golden oak.

(Check AV-46 on the form for further information.)

• • •

Dreis & Krump Manufacturing Company announce a change in design of all models of their line of Standard Hand Brakes and Universal Box and Pan Brakes to incorporate hard inserts for bending leaf bars and also for the top nose bar and bottom bar. It is claimed that these hard inserts increase the life of the bending edges. These inserts are also easily removed and replaced.

(Check AV-42 on the form for further information.).

For the amateur or professional breeder of game and poultry, the agriculturist, hobbyist or scientist, there is now available the Midget Incubator designed for egg hatching, seed germination and artificial germination of germ organisms and microscopic cultures, and other uses.

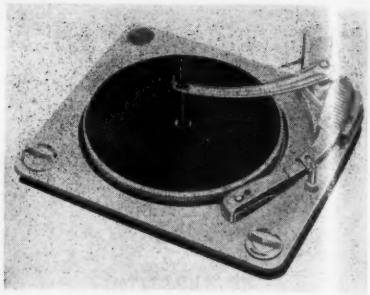
A complete unit housed in aluminum and ready to plug in, it is designed to operate as any home electric appliance. Even a child can use it.

For hatching, it is more dependable than the setting hen and eliminates the possibility of breakage, trampling and neglectful cooling. Temperatures are controlled thermostatically and heat is supplied by inexpensive light bulbs. Window is provided for checking temperature and observing developments. Excellent for educational and experimental purposes as well as profitable breeding.

Seeds germinate remarkably fast due to controlled temperature and light. String beans grow so rapidly they must be transplanted in five days. Sprouts are sturdy and of fine green color.

Available in two sizes, Model has capacity for 24 chicken or 48 bantam eggs, measures 12" x 14" x 16". Model B has capacity for 6-8 chickens or 12 bantam eggs, measures 9" x 10½" x 9". Prices are F. O. B. factory. Midget Incubators are manufactured by and available from **The J. P. Glasby Manufacturing Co.**

(Check AV-41 on the form for further information.)



• The **Ronette Acoustical Corporation,** importers of Ronette "Fonofluid" system cartridges, microphones and other piezo electric products, is introducing a complete pickup-arm assembly incorporating TO-284 "Fonofluid" System Cartridges with two non-interacting sapphire styli, for which an intermodulation distortion of less than 1 per cent is claimed.

This "Fonofluid" turnover pickup is said to be of entirely new construction and to have several features that make it a true professional type pickup-arm. Stylus pressure is adjustable by means of a newly developed mechanism, which allows a fine adjustment of from one to eight grams. It has a double ballbearing swivel, which imparts high stability and is virtually torsion free. These are essential qualities for perfect tracking at high needle velocities and very low stylus pressures.

(Check AV-47 on the form for further information.)

• • •

An entirely new principle in the use of "clamps" is now made possible by the announcement of the #2203 "Jorgensen" Hinged Clamps. This type of clamp, which has been on the market only for a few months, is "hinged" so that it swings on its mount up to clamping position, or swings out-of-the-way when not in use. Now, when mounted in the #2203 steel track, the clamp not only swings in an arc of nearly 180° up to or away from the work, but is adjustable "sideways" along any length of track installed; therefore, in jigs and fixtures for production operations, or on a saw-horse or bench, the clamp-user can have his clamps always at hand, easily brought up to the work to be clamped. There is no lost time looking for clamps, and the clamping operation is extremely rapid owing to the "instant-adjustment" of the clamp within its capacity range.

The #2203 steel track is furnished in 24" sections, rust-proof finish, complete with mounting screws; it can be cut to shorter lengths—or butted together for longer lengths. Complete details available from **Adjustable Clamp Company.**

(Check AV-44 on the form for further information.)

What's New Department

AMERICAN VOCATIONAL JOURNAL

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AV 42	AV 46
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A report to you about the TEAMWORK of men and machines that helps maintain International Harvester leadership

How IH boosted Farmall® Super H transmission gear strength 25 per cent

When the McCormick® Farmall Super H with 24 per cent more horsepower replaced the Farmall H, transmission gears had either to be strengthened, or new and larger gears and case designed at heavy cost for retooling. Extensive research proved that strength of the Farmall H gears could be increased by 25 per cent, thus helping to hold the price line on the new Super H. The accompanying photographs show some of the steps in this cost-saving redesign.

1st, Subsurfaces stresses were analyzed by IH manufacturing research engineers and metallurgists. Polariscope photography of a scale model plastic gear tooth showed that stresses were greatest at the tooth base fillet (A), and at the gear pitch line (B), as shown by the concentration of stress lines in this isochromatic photograph.

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The common goal of IH research, design, metallurgical, manufacturing, and field test engineers is to improve the quality and performance of IH products, while keeping costs at a minimum. The result is product leadership that helps farmers everywhere reduce production costs and increase farm profits.

For more details, write for free engineering paper, "Stronger Gears for IH Tractors." There is no obligation. Send postcard with your name and address to International Harvester Company, P. O. Box 7333, Chicago 80, Ill.

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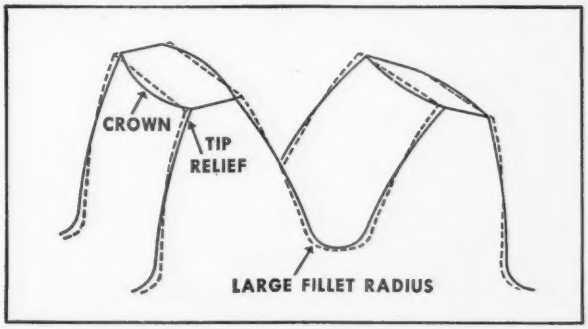
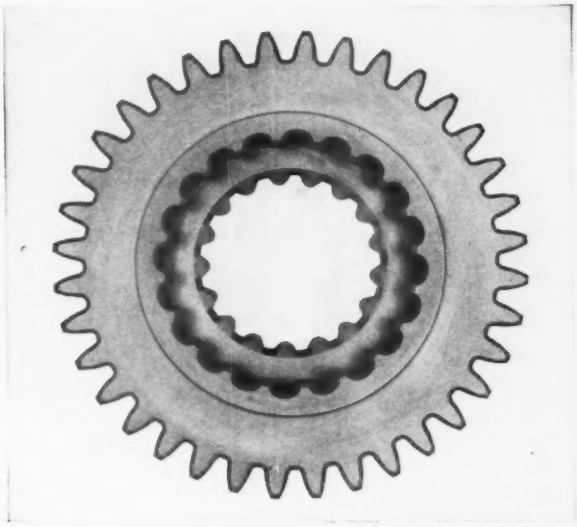


2nd, Tooth profile was redesigned by IH gear engineers. Radius of the tooth root fillet was increased. A slight "crown" was added to center the load evenly across the tooth face. Tooth profile was slightly modified, giving "tip relief" to prevent harmful interference as each tooth enters the mesh.



3rd, the gears were induction hardened—heat-treated by controlled audio and radio frequency waves—resulting in additional tooth strength to resist bending stresses, and hardness to resist wear. The high quality of the uniformly hardened "case" (dark outlines) permitted use of plain carbon steel instead of steel containing scarce alloys.

Increased horsepower enables the Farmall Super H to pull three 14-inch plow bottoms in average soils. Due to IH research, the transmission gears provide a greater margin of strength than in the two-plow Farmall H.

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At Shortridge High School, Indianapolis, Indiana, the girls learn shop-work right along with the boys, quickly, and with award-winning skill. The speed with which these students learn is attributed to the safety and ease of operation of the several DELTA Power Tools in the Shortridge High School Shop.

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